





BOOK
OF
RALSTON CULTURE
FOR
PHYSICIANS,
PROFESSIONAL AND AMATEUR
TEACHERS

HOME ENTERTAINMENTS, CLASSES, SCHOOLS, SEMINARIES,
COLLEGES AND UNIVERSITIES

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DEDICATION.

TO those noble men and women who were inspired with the ambition, and developed the executive ability to reach the TENTH STAR-DEGREE, this great volume, with its system of training, is hereby dedicated, together with the cordial wish that each owner may win, through its aid, the full measure of SUCCESS.

PLAN.

THIS volume is devoted to everything that can properly be classed under the head of Ralston Culture; and includes the following arrangement:

1. All the exercises of the Ralston System of Physical Culture classified in SERIES, briefly described.]
2. All the exercises in numerical order fully described.
3. All the music in numerical order. |
4. All the exercises in SETS, arranged in progressive order, as taught in Ralston University, at Washington, D. C.
5. All the music repeated in the progressive order of the sets as used in Ralston University.]
6. A collection of the exercises scientifically arranged for younger pupils in the public schools.
7. A collection of the exercises scientifically arranged for older pupils in schools and colleges.
8. The laws of grace and the conservation of energy.
9. The MINUET.
10. Entrance to RALSTON NATURAL COLLEGE. Accompanying the presentation of this volume to a Tenth Degree Star-Ralstonite, will be sent the AUTHORIZED LICENSE TO TEACH The Ralston System of Physical Culture. This license is a DIPLOMA based upon the possession of the full sets of exercises and music, and a recognition of the executive ability of the owner in successfully reaching the Tenth Star-Degree.

FIRST DEPARTMENT.

The Ralston Movement Cure.

FOR years it has been our aim to perfect a system of exercises which might have a triple purpose; first, to enable a person whose bodily functions are disordered by reason of an unequal distribution of nutriment, to secure health where all other means fail; second, to provide at the same time a code of exercises of the highest hygienic value for individual home practice; third, to reduce to a scientific system the muscular tests of strength and endurance only so far as they are in harmony with health.

The body is an absorbing and distributing machine. If the proper food is not eaten it is starved even by the glutton. If the proper food is eaten and the blood does not absorb it, ill health will surely follow; and it will be as often in the form of a blood disease or organic trouble, as in a special attack. If the proper food is eaten and absorbed, but not distributed, the body must suffer, and sickness must follow. These laws are absolute; and in them are found the explanation of many fatal maladies.

Exercise is the only distributing agent in the body. Medicines may for a time scatter nutrition; but a terrible penalty must sooner or later be paid. The exercises of the following pages are in the form of a perfect system, and they employ, one after the other, every muscle in the body from foot to head. As soon as one muscle or set of muscles is set in motion another is operated, and so on in succession from part to part. The Ralston plan is thus unique and original; for no other methods have even attempted this arrangement of use and instant relief of successive muscles. The effect is magical!

In undertaking to perform the movements, you are supposed to adopt all the suggestions of the second department in conjunction with those contained in and following the present description of the illustrations. By all means practice in sets, as stated in the second department, where the numbers of each set are given.

Do not trifle with any exercise by trying it a few times and then abandoning it.

The many blessings to the race that are derivable from the proper use of the Ralston System of Physical Culture compel every thoughtful man and woman to stop here and now for the purpose of surveying the field of opportunity. No one can afford to ignore these advantages, for there has come to us proof mountain high that the method is not only the best that has ever been produced, but is also the only thoroughly natural system of hygienic culture in existence to-day. Every part of its plan is founded upon some principle in Nature, as may be seen by consulting the further pages of this department, as well as those of the next.

Let us compare methods. The first idea is that any exercise accomplishes good. This is true in the sense that any action is better than idleness, for the latter leads to decay. In one system of physical culture there are so many thousands of movements that he who would use them must have the skill of an Apollo, the strength of a giant and the brain of an Archimedes; yet the school committee of a city some years ago paraded their ignorance by advertising for teachers of physical culture who were qualified to teach that system in all its details. Working steadily ten hours a day, they could not perform the system complete in less than five years. It is well known to-day that the authors of cumbrous courses of training had no other object in view than to collect a vast mass of movements together in order to impress the public with their supposed value. Bulk does not determine value. Quantity must yield to quality. A ton of coal is not worth a tiny diamond, although both are made of the same material—carbon.

The cumbrous system to which we refer is known as the Ling or Swedish method. It has proved so bulky that at one time it was abandoned as useless, though not worthless; and then again revived by culling out less than one per cent. of its mass, and rejecting the ninety-nine per cent. and more as not only unintelligible, but decidedly injurious. An examination of the whole or any part of the system will disclose but two natural principles involved in its workings; and these are inculcated and thoroughly used in the Ralston method presented in these pages. There is no other system of hygienic physical culture in the world to-day. An attempt has been made to brand the Delsarte training by such a name, calling it the French system; but this is wrong for two reasons; first, it has never been used in France for such a purpose,

as Delsarte invented his movements solely to prepare pupils for the stage by the use of gestures and facial expression; second, the Delsarte physical culture exercises of this country are the sporadic invention of anybody and everybody who chooses to devise muscular movements; and, where they are not worthless, they are dangerous and lead to nervous prostration.

One of the leading and most respected magazines of this country (Harper's) recently classed the physical culture systems of the world under three heads:

Ralston, or American.

Ling, or Swedish.

Delsarte, or French.

The real facts are these: No man, woman or child in France ever heard of Delsarte physical culture; and as far as his methods of acting are concerned, they died in France with him, but were revived in this country merely because they were of foreign origin. The Ling system long ago fell to pieces of its own weight. There is no safe, scientific and hygienic system now in existence, except the Ralston; and it is the duty of every true American to exclude that which is foreign if it is inferior to the production of our own country. Ralstonites should take pride in their method, and should see to it that it is adopted in every school in our land.

The beautiful exercises of this system add exquisite pleasure to the returning impulses of health. They tire without exhaustion, and their momentary tax is followed by a rebound of strength that invites new vigor. The remarkable principle of resting one part of the body while working another has never before been applied either to hygiene or to general physical culture. The proof of the great value attached to the Ralston System has impressed itself on the thinking portion of the public in almost every important section of America. Teachers, schools and committees are rapidly adopting it. Physicians, who ordinarily cling to old notions, are willing to abandon their fixed ideas and recommend Ralstonism to their patients.

One or two illustrations of this growing recognition may not be out of place. A prominent physician, who preferred the use of drugs to everything else, had for his patient a very wealthy merchant who had already suffered from too much medicine. He made a reverse contract by which he paid his doctor so much a

day for every day of freedom from sickness; and so much was taken off the bill for every day the merchant was ill. The use of medicines proved more and more disastrous, until finally the doctor, finding himself the loser, yielded up his prejudices and told his patient to take a new prescription—Ralstonism. As a result, the man got completely well, and has remained so. Another doctor who a few years ago declared that he did not wish to have anything to do with Ralstonism, and predicted its end as a fad long before the close of the year 1895, recently made the following statement: "I am ill at ease in my mind because of a gross injustice I have done the cause of Ralstonism, and I wish to say that I now recognize the value of the great work it is doing. Two patients of mine became pupils of your system of physical training, and thereby were cured of maladies that in my profession are regarded as hopeless. In this community I received a severe rebuke because I advised them not to take the trouble to learn the Ralston System, as I believed it would do them no good; and, when it actually cured them, I had to suffer." He went on to say that Nature was the best medicine he could prescribe, and he gave practical proof of his earnestness by becoming a high degree Ralstonite. Another physician wrote as follows: "It was at one time my belief that the spread of Ralstonism would lessen the income of the medical profession. I find from three years' observation that it has driven the quacks, or some of them, out of practice. But the honorable doctors must prescribe Ralstonism as they would pure air and wholesome food; and they who do so win the greater confidence of the public. * * * To conclude, I may sum up with the remark that if the physician has an honest desire to restore his patient to immediate health he will prescribe Ralstonism willingly; otherwise he will drag along for an indefinite period with medicines."

The fact that more than ten thousand persons have recently been advised by leading physicians to practice Ralston Physical Culture, whereas a few years ago nearly all doctors attempted to ignore Ralstonism, speaks conclusively of the growth, the strength and the permanency of the system. That it has come to stay is now admitted. The general public interest in it in certain localities was ascribed to a fad some years ago. That time has passed. It is everywhere spreading, and is winning the good opinions of the intelligent classes.

THE RALSTON MOVEMENT CURE.

EXPLANATION.

There are one hundred and two movements; of these there are seventeen series.

Each series is devoted to a particular part of the body.

In practicing the exercises the first of each series should be taken, and continued through the entire set.

The easiest exercise is the first of each series; the most difficult is the last. In any series, each succeeding exercise is harder than the preceding; but one series is no harder than another.

FOR A BEGINNER.

To one who is not used to muscular practice, any new movement will cause lameness. If, therefore, you do not become lame, the muscular movement is not new to you and will produce no special development. The lameness is sometimes severe, and may lead to a slight feeling of sickness.

THE FIRST SET—FOR BEGINNERS.

Figures 1, 7, 13, 19, 25, 31, 37, 43, 49, 55, 61, 67, 73, 79, 85, 91, 97. These seventeen exercises are the first of their series, and the easiest. It will be noticed that they employ every part of the body, every muscle in turn, and every set of muscles, one after the other. The first set, therefore, would be a complete school of physical training in itself.

Commit to memory the brief description given of each one; and spend time enough to absorb every part of each movement. Do not hurry. A glance at each description, or a hasty attempt to understand an exercise, will result only in flat failure. It is well to spend a week trying to learn one movement. After all, it becomes a matter of memory.

WHY COMMIT THEM TO MEMORY.

The Physical Culture Exercises, known as the Ralston Movement Cure, are new in every respect, although they contain the essential points of the most valuable of the preëxisting systems of physical culture. They are the result of many years of careful study, preparation and experiment. Not one exercise is now given that has not been tested and watched in all its results under varying circumstances and with different individuals. The movements are of standard value, and must sooner or later be so recognized.

In view of these facts, and after consultation with persons who are in a position to judge, we are justified in saying that the Ralston System of Physical Culture will be universally taught.

THE SECOND SET—FOR PROGRESSIVE BEGINNERS.

Figures 2, 8, 14, 20, 26, 32, 38, 44, 50, 56, 62, 68, 74, 80, 86, 92, 98.

It will be noticed that in the first and in the second sets there are very easy movements or exercises, while in each of the remaining four sets they grow more difficult.

It is both foolish and useless to attempt to perform the exercises in this or any subsequent set, before those preceding are committed to memory and thoroughly performed. *Good results can be obtained in no other way!* If you desire to see how great the benefit may be, resolve to master one exercise perfectly before proceeding to the next.

THE THIRD SET—FOR ADVANCED BEGINNERS.

Figures 3, 9, 15, 21, 27, 33, 39, 45, 51, 57, 63, 69, 75, 81, 87, 93, 99.

Do not attempt these out of mere curiosity. They are not beneficial until every exercise in the preceding sets can be skillfully performed.

THE FOURTH SET—FOR ENDURERS.

Figures 4, 10, 16, 22, 28, 34, 40, 46, 52, 58, 64, 70, 76, 82, 88, 94, 100.

THE FIFTH SET—FOR THE STRONG.

Figures 5, 11, 17, 23, 29, 35, 41, 47, 53, 59, 65, 71, 77, 83, 89, 95, 101.

THE SIXTH SET—FOR GRADUATES.

Figures 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102.

HOW TO ENJOY THEM.

Acquire a good memory. Learn the movements of each exercise, and be as familiar with each and all as if there were but one and you had mastered it. Know them by numbers. If some person should ask you how to perform 61, or 72, or 16, or 8, or 29, or any number, be so familiar with them by sets, series and figures, as well as by the analysis of movements, that you can both explain and perform them in the most thorough manner. Then you will always be at ease in the practice.

Work is not exercise ; it is work. It exhausts the vitality of one set of muscles, and then comes the fact that a chain is no stronger than its weakest link. The whole body is weary, the mind is tired out. We can easily prove that a body exhausted from toil may be rested by special exercises. The muscles, if properly used, may act for many hours daily and yet remain fresh all the while. Here are the facts:

1. The results will not merely interest, they will cause wonderment that so much good can be attained so quickly.

2. The progress will be speedy, clear, distinct, strong and lasting.

3. The secret of what seems to be the most puzzling and mysterious improvement is found in the amazing power of vitality which is derived from the continual shifting of action from one set of muscles to others in turn, producing, instead of weariness, a constant exhilaration and increase of strength.

4. The body works, not like one machine, but like many, distinctly separated in their uses.

5. This is the only regime by which perfect appetite is established, perfect assimilation of food attained, and perfect nutrition secured for building up a new body.

6. The exhilaration produced by Ralston Culture attracts the pure elements of the blood, destroys bad tissue, and creates good flesh.

7. Over-development is due to fat, not flesh; and Ralston Culture destroys this fat.

8. Shrunk flesh, or thinness, is due to lack of nutrition, not in diet, but in the tissue-growth of the body. See No. 5, above.

9. Ralston Culture differs from work in that it suffuses the body with a pleasurable excitement, and builds up a vigorous vitality; while work, without relaxation, deforms the shape, crooks the fingers, depresses the chest and bends the spine.

10. These exercises will distribute the nutrition throughout the body more evenly and more perfectly than any other system of personal culture ever employed.

Home entertainments are blessings in these days ; and, with the music which abounds in this book, you should be able to spend many an enjoyable evening. If you wish to earn money, you may do so provided you have the ability which is implied by the fact that you have reached the Tenth Star Degree.

Iron Legs



Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.



Fig. 6.

Ralston Physical Culture.

FIGURE 1. (*In first set.*) A body lacks health that is not able to sustain itself for hours on the feet. Sitting, lying down and weakness are related to each other. Vigor of health seeks the perpendicular support of the body. In this first exercise you are called upon to test the strength of the legs by slightly bending the knees in a forward direction and straightening them again; repeating the double action thirty-two times.

FIGURE 2. (*In second set.*) Stand with the feet apart as far as possible without lowering the body much. On the first count of the music, sway to the right side, bending that knee while the other is kept straight. Then, on the second count, bend the left knee as the body sways to the left side, while the right leg is made straight.

FIGURE 3. (*In third set.*) Stand with the heels together and the toes turned out to the sides. On the first count of the music, spread the legs apart at the knees only, as indicated in the illustration. On the second count bring the knees together and straighten the whole body. Then so continue for thirty-two counts.

FIGURE 4. (*In fourth set.*) The sets run crosswise from 1 to 7 to 13 to 19, and so on, for the first; from 2 to 8 to 14 to 20, and so on, for the second. We now begin the fourth set. The series run in numerical order. Figure 4 is the first of the fourth set and the fourth of the first series. It consists of the following parts: keep knees together, and lower the body until you almost sit on the heels; arms akimbo, that is at the sides, with hands on the hips; rise on the even numbered counts; descend on the odd numbered counts; thirty-two movements.

FIGURE 5. (*In fifth set.*) Commence as in Figure 2, with the variation of lifting the free foot laterally a few inches from the floor. It is very easy to do at first, but becomes very difficult as it is continued. The free foot is the one that sustains no weight at the time.

FIGURE 6. (*In sixth set.*) This is the hardest of all in the Iron Legs, the object of which is to give the limbs such strength as to render them capable of sustaining the weight of the body at all times and under all circumstances. The first part of the exercise consists in spreading the feet apart laterally on one count of the music, a few inches to begin with. At the second count the feet must be brought together so as to strike the heels, but the soles of the shoes must not leave the floor.

Foot Exercise



FIGURE 7. (*In first set.*) This is the second exercise in the first set, and the first exercise in the second series. This series includes all on the opposite page preceding. It is necessary to make the muscles of the feet strong enough to sustain the weight of the body. The weight is placed on one foot, and this alone invites double strength. On the count *one*, the other foot is raised as high as possible in a perfectly straight line; on the count *two*, it is brought to the floor without allowing even an ounce of weight to rest on this foot. Repeat thirty-two times; rest on the other foot and again repeat.

FIGURE 8. (*In second set.*) This is apparently an easy exercise; but its repetition produces that pleasant taxing of the muscles which gives great strength without strain. The whole weight of the body must be lifted gently but quickly until it is sustained from the tips of the toes; this is on count *one*; then on count *two* it is lowered again until the heels rest lightly on the floor.

FIGURE 9. (*In third set.*) This is a peculiar exercise. It is something like Figure 7, but the effect is quite different. It requires special music to enable the muscles to respond properly to the impulse of the action. On count *one* the right foot is raised, and its upward momentum is to aid in lifting the weight of the whole body so as to be sustained on the toes of the left foot. On count *two* the raised foot comes to the floor; and so continue.

FIGURE 10. (*In fourth set.*) Stand; raise the leg in front of the body until it is at right angles; describe a circle with the foot and limb without bending the knee or ankle. On sixteen counts the foot should circle to the right; and on sixteen more to the left. Then change the support, and exercise the other leg in the same way.

FIGURE 11. (*In fifth set.*) This is very hard to do right, although it is a simple exercise. Stand as before; keep the body straight; describe a large circle with the free foot, sixteen times to the right and sixteen to the left; then reverse the position and do the same with the other foot. Rest only the toe of the moving foot on the floor.

FIGURE 12. (*In sixth set.*) This is like the movement in Figure 11, except that, instead of a circle, the foot describes a straight line forward, then sweeps in a large outward semicircle around to the back and comes up in a straight line; thirty-two times with each foot.

Ankle Exercise.



Fig. 13.



Fig. 14.



Fig. 15



Fig. 16.



Fig 17



Fig. 18.

FIGURE 13. (*In first set.*) In this, the third series, are presented special exercises for strengthening the muscles about the ankles, and those that lead to them. Each movement is to be commenced in the regular position. Change on count *one*, by crossing one leg in front of the other, the toes meeting so as to make a letter **V** reversed, thus **Λ**, with the feet. On count *two*, bring the retired foot to the front by recrossing and making another **Λ**, toes touching. If you do it right, you will not move out of your position.

FIGURE 14. (*In second set.*) This is a rocking movement, and, like all in the ankle series, is very interesting. Stand in the position of Figure 13. On count *one* rise as high as possible on the toes, by raising the heels; on count *two* come down on the heels, raising the toes as high as possible. If you are not able to keep your balance, some muscles are weak.

FIGURE 15. (*In third set.*) This is the parallel exercise of the feet. Stand in the first position; feet side by side, parallel, but several inches apart; move the heels to the right while resting the weight on the toes of both feet, still keeping them parallel; then support the weight on both heels and move the toes to the right; count sixteen times, then move back to the left on sixteen counts.

FIGURE 16. (*In fourth set.*) This is a beautiful and very interesting exercise, as well as one that is beneficial in the highest degree. It is rather hard to explain, and reference must be had to a later page where the music appears with it in larger form. It starts with one foot behind the other, the legs being crossed at the ankles. The blow of the step against the advanced foot sends the latter on a few inches; but the length of the movement may be made very great by practice. There is no jarring of the body, and no actual force in the blow, if properly performed.

FIGURE 17. (*In fifth set.*) Stand in such a position as will place the feet in a straight line, the heels touching and the toes turned out laterally. On count *one* place the weight on the toes, rise, and turn out the heels laterally. This will cause the feet to spread. Return to the position first indicated with heels together, on count *two*. Repeat for the thirty-two counts.

FIGURE 18. (*In sixth set.*) This is like the movement in Figure 17, except that it is too difficult to be performed without a great amount of practice. Stand with the feet together in a **V**-shaped position; rise high on the toes, and swing the heels out to an extended lateral position.

Knee Exercise



Fig 19



Fig.20.



Fig.21.



Fig.22.



Fig.23.



Fig.24.

FIGURE 19. (*In first set.*) The present table introduces a series of specific movements designed to test as well as to develop and strengthen all the knee and related muscles. Stand; arms akimbo; take a long step forward, facing also forward; lower the body until the forward leg is bent exactly at right angles. Count *one* on this forward movement; *two* as you bring the body back in position; *three* as you again go forward; and so on for thirty-two counts; then reverse, and exercise the other knee.

FIGURE 20. (*In second set.*) This appears to be somewhat like Figure 19; but it differs very materially, as practice will prove. Face to the front, and move sidewise. Take a large lateral step, that is to the side, and not at all toward the front, although the body must face to the front. Bend as stated in Figure 19, and count thirty-two movements with each leg.

FIGURE 21. (*In third set.*) Step backward on the bent knee, in the manner of Figures 19 and 20. The picture on the opposite page shows but a slight bending of the knee; but if you are able to keep time with music, or counting, and lower the body very much, it will be a more heroic species of exercising. On count *one* take a long step backward, with the weight of the whole body on the bent knee; on *two* come forward to the standing position. Count thirty-two, exercising each leg.

FIGURE 22. (*In fourth set.*) This is a back lateral movement, and is the opposite of that in Figure 20. Here the right leg is passed behind the left until the foot is on the left side of the latter, and the right knee is behind the left knee. The body is to be lowered as in Figure 20, and all this is done on *one* count. On count *two* the feet are brought into the regular standing position.

FIGURE 23. (*In fifth set.*) Stand; arms akimbo; take a long stride forward; kneel slowly until knee almost touches the floor; it must, in fact, just come to the floor without putting weight on it; and the former knee must be at right angles. Rise on count *two*; then kneel and rise for thirty-two times. Repeat thirty-two times more with the other limb.

FIGURE 24. (*In sixth set.*) This is a peculiar exercise, and one that is very taxing, though entirely without strain. It consists in four counts. On the first the body kneels from a standing position, the knees not quite touching the floor; on the second count the knees rest on the floor; on the third they are raised a few inches; on the fourth the body stands erect.

Hip Exercise.



Fig. 25.



Fig. 26.



Fig. 27.



Fig. 28.



Fig. 29.



Fig. 30.

FIGURE 25. (*In first set.*) Part by part the exercises have risen along the muscular lines of the body; and, if they have been practiced in sets, the results are sure to be a constant relief and change of action, producing the most refreshing sensations, especially if proper food and fresh air have been taken. Stand; arms akimbo; heels together; on count *one* prepare; bend the body at the hip joints, not at the waist, as far forward as possible on count *two*; straighten up on count *three*; and repeat for thirty-two counts.

FIGURE 26. (*In second set.*) On count *one* throw the hip only to the right, but at the same time turn the face to the left. This will produce a twisting of the muscles in a very slight degree, and will reach certain results that are obtainable by no other movement. On count *two*, reverse by throwing the hip to the left and face to the right. Repeat for thirty-two counts.

FIGURE 27. (*In third set.*) This is a rotary movement, not at the waist, but at the hip joints. On count *one*, throw the hip to the left; on count *two*, throw the hip to the front; on count *three*, throw the hip to the right; on count *four*, throw the hip back. Repeat for thirty-two counts. During all these movements the head remains directly over the feet.

FIGURE 28. (*In fourth set.*) If you lose your balance, your muscles are weak. In the present exercise the movement must be made daintily. On count *one*, sway the hip to the right, swinging the left leg across the other to the right; on count *two*, sway the hip to the left, and swing the right leg across the other to the left. Repeat for thirty-two counts.

FIGURE 29. (*In fifth set.*) This must be performed distinctly as a hip action. Stand in a straight position; bend at the hip joints by swinging the hip to the right, and balance this by throwing the head, shoulders and free limb all to the left in one action. Here are four things to be done at once on count *one*; then on count *two* a complete reverse is made, by changing the weight to the other foot, hip to the left, and head, shoulders and free foot to the right.

FIGURE 30. (*In sixth set.*) To begin this exercise kneel on the knees; then on count *one* raise the right knee from the floor, and on count *two* drop it on the floor as in the beginning. The purpose is to strengthen the hip muscles by movements that are distinctively useful where no other action will be effective. Repeat the foregoing for eight counts; then move the left knee the same number of times; then repeat for thirty-two counts.

Waist Exercise



Fig. 31.



Fig. 32.



Fig. 33.



Fig. 34.



Fig. 35.



Fig. 36.

FIGURE 31. (*In first set.*) No exercises are so healthful as those that put the waist muscles to a vigorous test. In the present movement, a straight line must be preserved from waist to feet; bend to the right on count *one*, and to the left on count *two*. Repeat thirty-two times.

FIGURE 32. (*In second set.*) The only way of understanding this exercise is to compare it with Figure 27. They seem alike when carelessly performed, but are opposites of each other. In Figure 32 the head does not remain over the feet. On count *one* throw the head and shoulders very far to the left; on count *two*, to the front; on count *three*, to the right; and on count *four*, to the rear. Repeat for thirty-two counts.

FIGURE 33. (*In third set.*) This is a peculiar movement intended to affect the waist muscles in a way that can be accomplished by no other exercise. The upper body moves on count *one* to a right oblique backward position, and on count *two* to a left oblique forward position. The head remains over the feet. Repeat eight times, and reverse to the left backward and right forward positions.

FIGURE 34. (*In fourth set.*) Extend both arms to lateral positions on a height with the shoulders. Keeping them thus in position, swing them, like one great beam, to a front and back direction, the face looking to the right; count *one*. Swing to the opposite side, face to the left, on count *two*. Repeat for thirty-two counts. This is a twisting or spiral movement, and only the waist muscles should be employed.

FIGURE 35. (*In fifth set.*) Take same position as in Figure 34. On count *one* bend at the waist to the left, and keep the arms in a straight line like one long beam. On count *two* raise the left end of this beam, lower the right and bend at the waist. Repeat for thirty-two counts. This is called the walking-beam exercise. It is one of a large number of the Ralston System of exercises that are very beautiful in class drill.

FIGURE 36. (*In sixth set.*) This is the best as well as the most difficult of the waist movements. It is highly beneficial. Kneel; on count *one* place the two hands on the raised knee; on count *two* throw the body back as far as possible, carrying the arms backward at the same time. Repeat eight times; then reverse by raising the other knee, and so on for thirty-two counts.

Chest Exercise



Fig. 37.

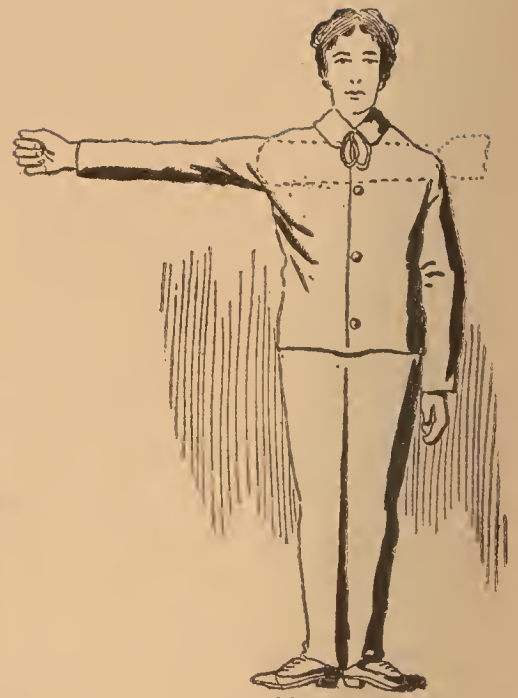


Fig. 38.



Fig. 39.



Fig. 40.



Fig. 41.

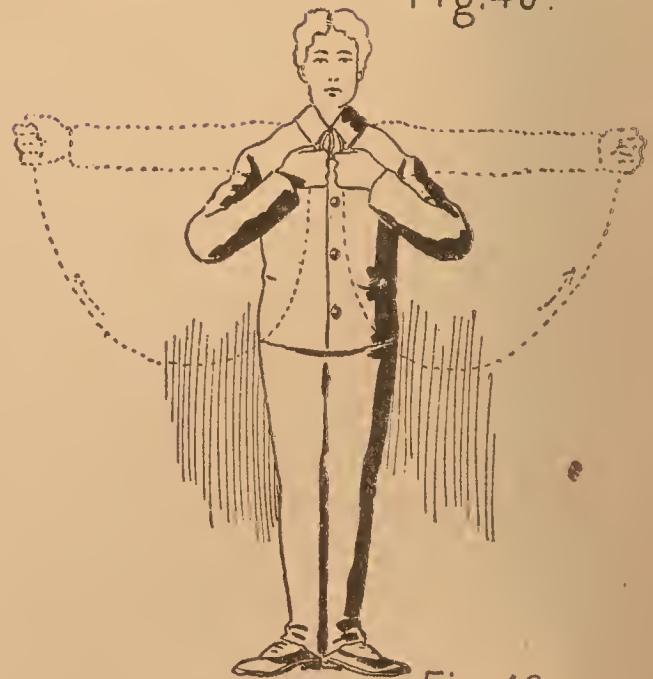


Fig. 42.

FIGURE 37. (*In first set.*) The first exercise here given applies to the lower chest, and is very slight in its action, but powerful in its benefits. Place the palms of the hands at the sides, on the lower side-ribs. On count *one*, inhale and expand as much as possible at this place on either side. On count *two*, exhale and contract at the side-ribs. Repeat for thirty-two counts.

FIGURE 38. (*In second set.*) Stand; left arm at side; raise right arm into an outward position on a line with the shoulder. On count *one*, move the arm, with fist strongly clinched, across the front of the chest, without bending the elbow. On count *two*, move outward to a horizontal position; and so on for thirty-two counts.

FIGURE 39. (*In third set.*) This is called the Wing Movement. Place both hands upon the chest near the shoulders, with the elbows at the sides, hard against the body. On count *one* raise the elbows, without moving the position of the hands. On count *two* strike the sides of the chest with the elbows. Continue for thirty-two counts.

FIGURE 40. (*In fourth set.*) All the exercises of this series, and the majority of all the others, are new and peculiarly adapted to the Ralston System. The present movement is called the perpendicular drill. It must be correctly performed or it will be useless. Place left hand at the side, hanging down at full length. Clinch the fist of the other hand; on count *one*, bring it up with great energy, directly under the armpit, so as to hit the under part of the arm. On count *two*, still clinching the fist very hard, bring it down with force enough to shake the whole body. You can easily shake the floor of a frame building, if you are strong. Sixteen counts with each arm.

FIGURE 41. (*In fifth set.*) Place the palm of one hand on the chest; strike it with the palm of the other. Give thirty-two blows in all, one on each count, and move the under hand to various parts of the chest.

FIGURE 42. (*In sixth set.*) This is one of the pleasantest and most exhilarating of all exercises; but to be properly enjoyed it is necessary that the movements be understood, the music be exactly suitable and the action coincide precisely with the music. It is not possible to describe it in this brief notice, and reference must be made to a later page, where the music also appears with it.

Shoulder Exercise.



Fig.43



Fig.44



Fig.45.



Fig.46.



Fig.47.



Fig.48.

Ralston Physical Culture.

FIGURE 43. (*In first set.*) The purpose of the present series of movements is to call into play the muscles in and about the shoulders. In Figure 43 one shoulder must be moved thirty-two times, and then the other must be likewise exercised. There is no advantage in the see-saw alternate movement. Stand; let both arms hang at the sides. Raise the right shoulder as high as possible; almost to the ear. Lower it firmly, and repeat.

FIGURE 44. (*In second set.*) Stand with the arms at the sides. Raise the right shoulder as high as possible, almost touching the ear; then bring the shoulder forward as far as you can without moving any other part of the body; now lower it very energetically, but do not allow the opposite shoulder to rise; then move the shoulder as far back as possible, thus completing the circuit. All this must be done on the count *one*. Count thirty-two with the right shoulder, and the same number with the left.

FIGURE 45. (*In third set.*) This is the most taxing of all exercises, yet does not produce any strain whatever, nor lower the vitality of the body. Muscles will not grow stronger unless taxed. On count *one* raise the hands as in Figure 45, the arms being bent to right angles at the elbows. On count *two* lower the hands, still preserving the right-angle position. Repeat until tired.

FIGURE 46. (*In fourth set.*) Clinch the fists and raise them at full arm's length above the head until they strike together. On count *one*, bring the fists swiftly down to the sides, each taking a large outward movement in the form of a semicircle. On count *two*, raise the arms by the same outward curves and bring the fists together with energy high over the head. Continue this for thirty-two counts.

FIGURE 47. (*In fifth set.*) Commence in a standing position; rise on the toes of one foot; extend the hand forward and upward as high as possible, even to a very long stretch; the other hand swinging down and behind the body. While in this position take a very long, deep breath and clutch at an imaginary bunch of grapes by an extra effort to rise; all this on count *one*. On count *two* resume an ordinary standing position as in Figure 1 of Iron Legs. Repeat for sixteen counts with the right side of the body advanced; then sixteen with the left side.

FIGURE 48. (*In sixth set.*) In this the body is supported with the weight on both feet; the right hand is raised and pushed *forward*, the left hand is lowered behind and pushed *down*; all this on count *one*. Count *two* is a regular position. Repeat for sixteen counts; then reverse for sixteen more.

Arm Exercise



Fig. 49.



Fig. 50.



Fig. 51.

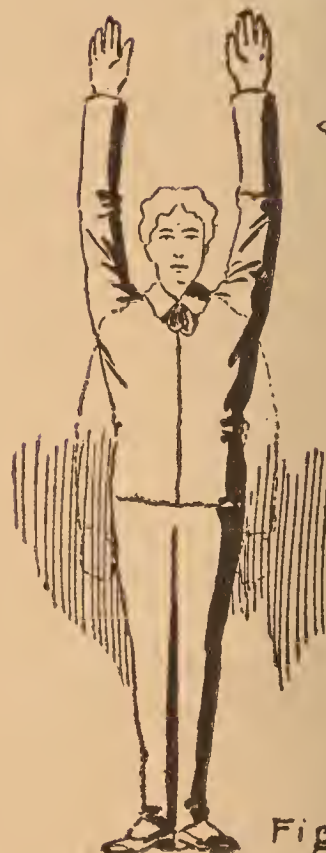


Fig. 52.

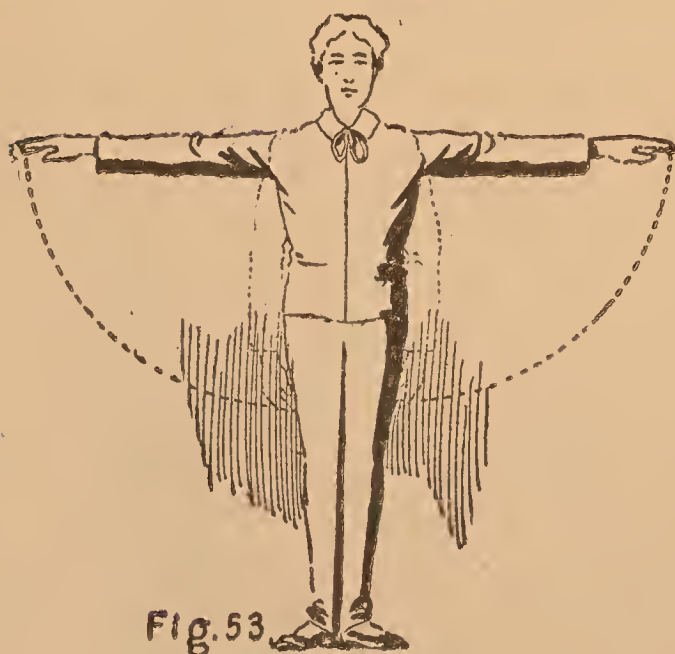


Fig. 53.



Fig. 54.

FIGURE 49. (*In first set.*) By that process of change, variation and relief that always gives muscular pleasure, we come now to the specific movements of the arm and its direct and supporting muscles. The chief fault with all systems of physical culture is that they consist of only two classes of movements, those of the arm and general body; and the laws of tension, relaxation and relief are then impossible. In the present figure, extend one arm to a lateral position; on count *one* rotate the fist, but not in a circle; on count *two* rotate back again as far as possible. Repeat for thirty-two counts.

FIGURE 50. (*In second set.*) Put both hands over the shoulders, each over the shoulder of its own arm; the palms of the hands touching the back at the shoulder blades. This is the starting position. On count *one*, lower the elbows; on count *two*, lower the wrists; on count *three*, extend the fully open hands in front; on count *four*, go back to position. Repeat for sixty-four counts. The exercise is not only new, but is the best arm drill ever yet invented, as its use will prove.

FIGURE 51. (*In third set.*) This exercise taxes the muscles of the upper arm. Clinch the fists; raise arms on a height with the shoulders in a lateral extension; from this swing the stiff arms to the front of the body on the count *one*; then to the extended lateral position on count *two*; and continue for thirty-two counts, never bending the elbows.

FIGURE 52. (*In fourth set.*) This is a very invigorating exercise. Raise the arms high over the head in an outward swing and then bring the hands straight down past the shoulders to the sides, gradually clinching the fists as they descend. Count *one* on raising them, and *two* on the descent. Repeat for thirty-two counts.

FIGURE 53. (*In fifth set.*) This is an interesting exercise, and one that is beneficial. To begin it place the hands out laterally as far from the shoulders as possible. On count *one* bring them down vigorously against the body. On count *two* raise them to position.

FIGURE 54. (*In sixth set.*) This is a still more elaborate movement than that required in the last of the chest exercises. The two may well be studied together, both as to the details of execution and the effects produced upon the health of the body. Figure 42 opens out the chest frame and imparts great strength. Figure 54 is a spiral movement of the arms. See description that accompanies the music on later pages.

Hand Exercise.



Fig. 55.

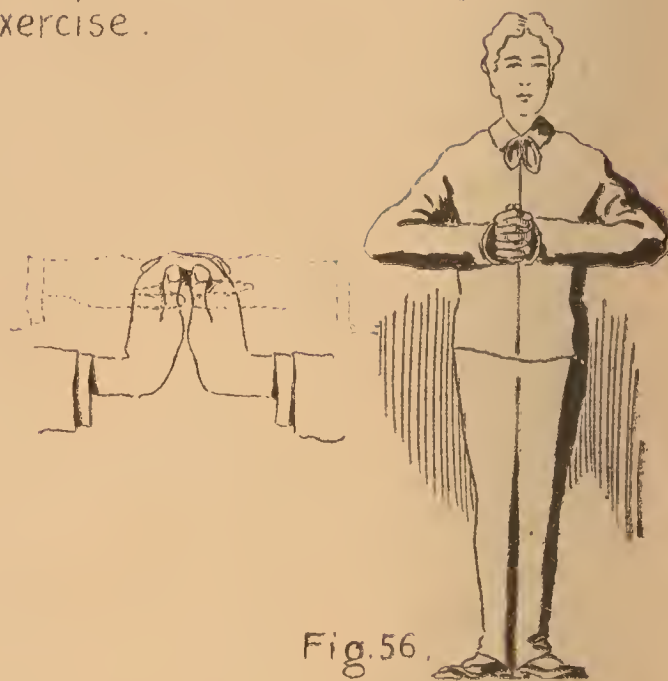


Fig. 56.



Fig. 57.



Fig. 58.



Fig. 59.



Fig. 60.

FIGURE 55. (*In first set.*) The present series deals with the muscles of the hand, involving the general body more or less. It is well known that the hand-muscles are dependent upon the arm-muscles, and that the latter are related to the chest-muscles. In this exercise, stand; one hand at the side; extend the other to arm's length; on count *one*, open the fingers as widely apart as possible; on count *two*, close them as tightly as possible. Repeat with the right hand for thirty-two counts; then the same with the left.

FIGURE 56. (*In second set.*) Clasp the hands in front of the body by interlacing the fingers, the palms being together; the hands being as far to the front and away from the body as possible. On count *one*, open the palms, using the fingers as hinges; on count *two*, bring the palms together. Repeat for thirty-two counts.

FIGURE 57. (*In third set.*) Hook the fingers together. This is not like interlacing. Extend the hooked hands as far to the front as possible. On count *one*, bring the hooked hands in toward the chest, while pulling hard, as though trying to get them apart. This pulling must be by a lateral action of the elbows. On count *two*, extend them to the first position in front. Repeat for thirty-two counts.

FIGURE 58. (*In fourth set.*) Bring the hands together so that the palms and fingers touch; extend them thus as far as possible. On count *one*, bring the wrists hard against the right shoulder; on count *two*, out in front; on count *three*, against the left shoulder; on count *four*, out in front; and so on for thirty-two counts.

FIGURE 59. (*In fifth set.*) Commence this exercise by raising the left hand and lowering the right so as to form an oblique or leaning line with the two arms. On count *one* lower the raised hand and raise the lowered one, allowing the palms to strike as they pass. This will leave the right hand raised and the left hand down. On count *two* strike again and pass to the first position; and so continue for thirty-two counts.

FIGURE 60. (*In sixth set.*) Start with the hands at the sides. On count *one* strike them in front; on count *two* strike them behind the body; and so continue for thirty-two counts. The exercise is very interesting with music that exactly suits it.

See the full set of music on later pages of this volume, with supplementary explanations. Compare all these descriptions with them as you proceed.

Neck Exercise.



Fig.61.



Fig.62.



Fig.63.

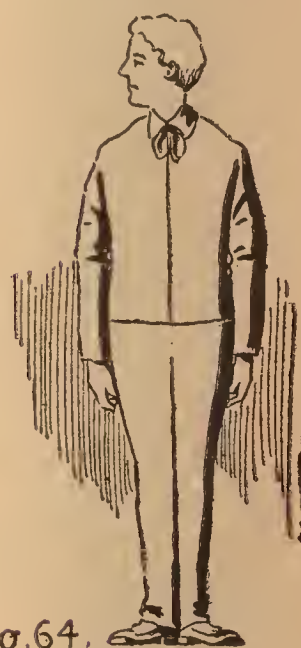


Fig.64.



Fig.65.



Fig.66.

FIGURE 61. (*In first set.*) In each series we present the most valuable special movements applicable to the division of the body to which it applies; and we come now to the neck division. In the present figure, the movement is confined to the neck muscles alone. Let the arms hang at full length at the sides; drop the head forward until the chin rests upon the chest; count *one*. Now raise the head until the chin points toward the ceiling, or the back of the head almost touches the back; count *two*. Repeat for thirty-two counts.

FIGURE 62. (*In second set.*) Take the usual standing position with the hands at the sides; incline the head to the left on count *one*, until the ear almost touches the left shoulder. On count *two* incline the head to the right until the ear almost touches the right shoulder. The face must be kept to the front while the head is being inclined right and left, so as not to involve a different muscular action of the neck. Repeat for sixty-four counts.

FIGURE 63. (*In third set.*) On count *one*, incline the head to the right; on count *two*, incline the head backward until the chin points toward the ceiling; on count *three*, incline the head to the left; on count *four*, drop the chin upon the chest. The top of the head must be made to pass in the line of a perfect circle. Continue for sixty-four counts.

FIGURE 64. (*In fourth set.*) In the preceding exercises the face has turned neither right nor left. The present movement requires a very hard and full turn to the right on count *one*; to the left on count *two*; and so on for sixty-four counts. A slight turning of the head will not suffice, for no advantage would accrue therefrom. In order to properly exercise the muscles, the head should turn without moving the shoulders so that you can see the floor at your heels.

FIGURE 65. (*In fifth set.*) Take the usual standing position with the hands at the sides; incline the head at first as far back as possible, and hold it in this position of readiness. On count *one*, roll the head until the face turns squarely to the right; on count *two*, roll the head in the opposite direction, facing to the left; and continue this for thirty-two counts.

FIGURE 66. (*In sixth set.*) On count *one*, reach forward with the chin, and give the muscles of the neck a good stretching, at the same time throwing the shoulders back. On count *two*, throw the shoulders forward and bring the chin in. Continue this for sixty-four counts.

Whole Body Exercise.



Fig. 67.

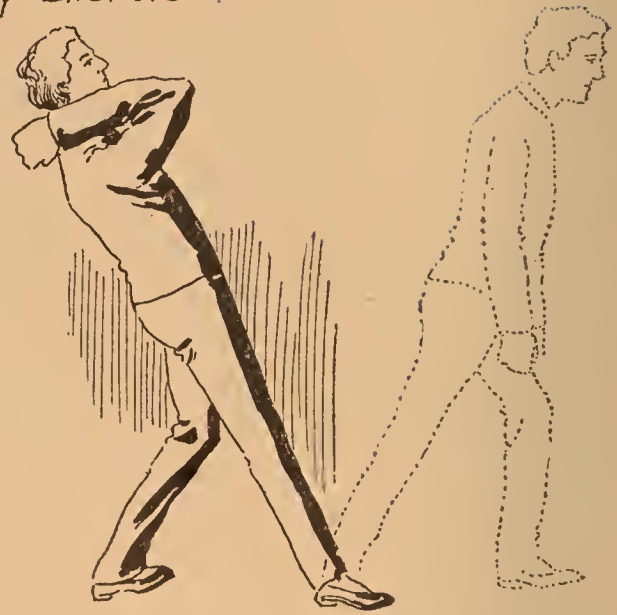


Fig. 68.



Fig. 69.



Fig. 70.



Fig. 71.



Fig. 72.

FIGURE 67. (*In first set.*) Raise the right arm and throw it so far over the head that the fingers touch the left ear; and while doing this lower the body by reaching with the left hand downward toward the floor. The foregoing combination constitutes count *one*. For count *two*, raise the left arm over the head and reach down with the right arm. Thirty-two counts.

FIGURE 68. (*In second set.*) Put the hands in the hand-shaking clasp; that is, palms together, hands at right angles. Raise the hands high over the right shoulder, fingers downward, on count *one*; weight on the left limb retired. On count *two*, advance the left foot by a large stride, and bring the clasped hands down to the left side. On *three*, raise over the left shoulder; on *four*, down to the right; and so on for thirty-two counts.

FIGURE 69. (*In third set.*) On the first count raise the hands, palms touching, as high in front as possible. On count *two* lower the hands between the feet so as to pick up a handkerchief from the floor if necessary. On count *three* carry the hands by a large forward curve to the high position; and so continue for thirty-two counts.

FIGURE 70. (*In fourth set.*) This begins with a standing position. On count *one* kneel on the right knee; on count *two* rest part of the weight on the right hand flat on the floor; on count *three* sit; on count *four* cross the knees and clasp the hands over one knee; on count *five* rest on the hand; on count *six* put weight on right knee; on count *seven* put weight on left foot; on count *eight* stand erect. Repeat.

FIGURE 71. (*In fifth set.*) On count *one* kneel laterally upon the right knee; on count *two* support the entire weight of the upper part of the body upon the right hand resting upon the floor, the left raised; on count *three* rise to the kneeling position; on count *four* rise to the feet; on count *five* down on the left knee; on count *six* support on the left hand; on count *seven* rise to the kneeling position; on count *eight* rise to the feet.

FIGURE 72. (*In sixth set.*) Turkish salute. Cross the legs at the knees, let the body rest upon the toes; extend the hands to the right and left with the palms down. On count *one* lower the body slightly by bending at the neck, waist, hip and knees all at the same time; on count *two* lower the body still more; on count *three* lower it further; on count *four* bring it to its lowest possible position; bring it back to the standing position by four counts.

Rapid Exercise.



Fig.73.

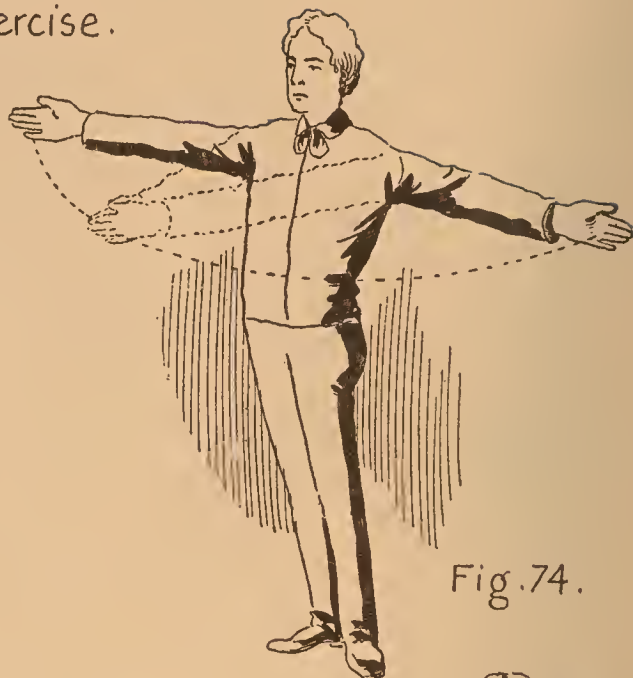


Fig.74.

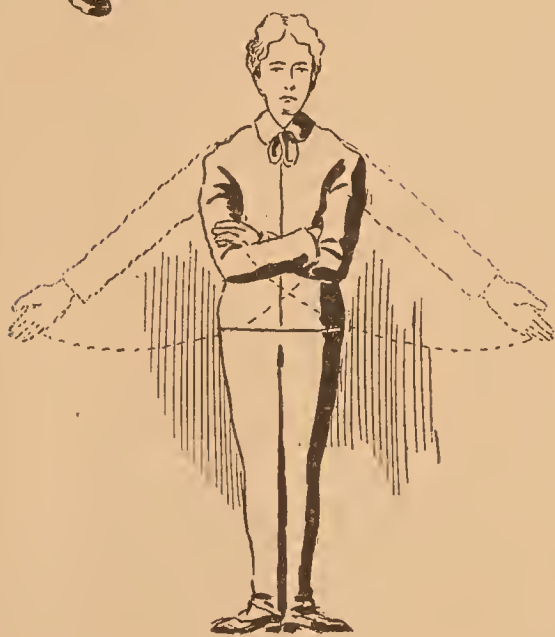


Fig.75.



Fig.76.



Fig.77.



Fig.78.

Ralston Physical Culture.

FIGURE 73. (*In first set.*) Clinch the fists as tightly as possible; hold the left arm perfectly still and rotate the fist around it with the utmost speed; then reverse the process by holding the right arm still and rotating the left fist around it. Endeavor to make the speed as great as possible. Now rotate both fists around each other; then reverse the direction, in order to give the same muscles a different action.

FIGURE 74. (*In second set.*) Have the palms touch each other in front of the body; on count *one* separate the hands about a foot; on count *two* separate another foot; on count *three*, another; on count *four*, another; on count *five*, another; on count *six*, another; on count *seven*, another; on count *eight* bring the hands forward with a large, long, full sweep and with lightning rapidity striking the palms heartily against each other in front. Repeat for thirty-two counts.

FIGURE 75. (*In third set.*) On count *one* throw both arms around the front of the body, allowing them to cross at the lower front chest; on count *two* extend them and bring them to the front again all in one swift action. This is something like the movements of a New England farmer who attempts to warm himself on a cool day.

FIGURE 76. (*In fourth set.*) Hold the right arm out obliquely front on a height with the shoulder; that is, half way between a front and a lateral position. With the index finger of the hand describe a circle as rapidly as possible; then reverse. Change to the left hand, giving the right a rest. The music permits great speed in this exercise.

FIGURE 77. (*In fifth set.*) Stand. Raise the arms so that the clinched fists will come in front of the body on a height with the lower chest. Imagine that you are in a crowd playfully elbowing your way through. On count *one* hit backward with the right elbow; on count *two* with the left; and so on for thirty-two counts.

FIGURE 78. (*In sixth set.*) Raise the hands in front of the head as though to take a leap forward. On count *one* bring the hands down and slightly behind the legs, as though the jump had been taken; on count *two* bring the hands up in preparation for another preparatory leap. Repeat until tired.

Speed is not a valuable exercise of the highest order unless it is carried to the full rapidity required; even five seconds of such quickness of movement being more efficacious than ten minutes of slower action.

Light Step Exercise



Fig.79.



Fig.80.



Fig.81.



Fig.82.



Fig.83.

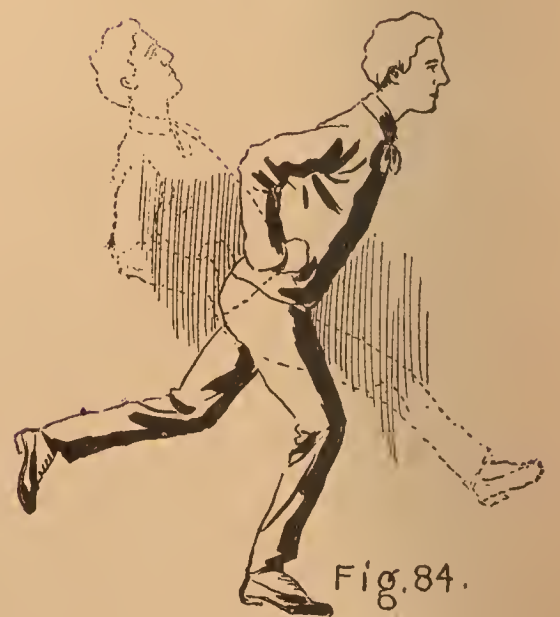


Fig.84.

FIGURE 79. (*In first set.*) Repeat the words *one*, two, three; *one*, two, three; *one*, two, three, etc. The *one* should be specially emphasized. After repeating aloud several times and being in a standing attitude on the ball of the left foot with the arms akimbo, jump about ten inches in the air, at the same time throwing the right foot forward. The jump on the left foot and the forward action of the right foot both occur simultaneously on the count *one*; and the remaining numbers serve as the preparation for the next jump, which will be given with the right foot while the left is thrown forward. Repeat for thirty-two jumps.

FIGURE 80. (*In second set.*) Give a very light, high jump on the left foot, and throw the other foot out as far as possible to the right. This combination occurs on number *one* in the count of *one*, two, three. The second jump is given on the right foot, with the other thrown out as far as possible to the left side. Thirty-two jumps.

FIGURE 81. (*In third set.*) Raise the hands to the sides, and run as hard and fast as you can, without moving forward. The action may be given with any degree of speed. Raise the heels high in the act of running.

FIGURE 82. (*In fourth set.*) Take a step to the right lateral by moving the right foot to one side, and follow this movement by a sliding action of the left foot toward the right. The weight remains on the latter during the measure or its chief accent. On the second measure move to the left side; and so on.

FIGURE 83. (*In fifth set.*) This is an imitation in part of the typical sailor's step as seen on the stage, though never in real life. It is a very beautiful movement when rightly done. A full explanation will be found on a subsequent page, with music, to which your attention is called. See Figure 185.

FIGURE 84. (*In sixth set.*) Support the body on the right foot; on the counts *one*, *two*, give two jumps on the right foot, throwing the upper part of the body far forward and the left leg as far back as possible. On the counts *three*, *four*, give two jumps, with the right foot thrown as far forward as possible and the upper part of the body back. Repeat for thirty-two counts.

Be careful not to continue the light step too long, as it exhausts vitality unawares, owing to its fascination and the interest it arouses.

Devitalizing Exercise.



Fig. 85.



Fig. 86.



Fig. 87.



Fig. 88.



Fig. 89.



Fig. 90.

FIGURE 85. (*In first set.*) This series presents a new practice in the art of distributing the nutrition through the body by the only known natural method, exercise. It was only a few years ago that relaxation was thought of; and the earliest method even at this late date was rest. But, after a hard effort, the muscles harden and become very sore if they suddenly rest. A change of exercise is one method of relaxation, but careless movements are more effective if made scientifically. Place the elbows at the sides; hold the lower arms firm; shake the fingers as if they were so many limp strings.

FIGURE 86. (*In second set.*) Stand in perfect poise on one foot; place the arms akimbo; lift the other foot and shake it without muscular energy in the foot. These are called devitalizing exercises, and are intended to take all the stiffness and soreness out of the muscles. They are the opposites of energizing movements.

FIGURE 87. (*In third set.*) Of recent years the value of relaxing the muscles by *using* them, but in the opposite of energy, has come to be fully recognized in all parts of this country. There are really three ways in which a muscle may be moved; one, with energy, for health, by the distribution of nutrition; two, normally, that is without energy; three, by devitalizing, for relaxation. Yet all three are actual movements. In the present exercise, hold the arms at the sides, lift the forearms, and let them fall of their own weight. Repeat thirty-two times.

FIGURE 88. (*In fourth set.*) Raise the arm to its full height; relax its muscles, and let it fall of its own weight. In order to test the difference between energy, lassitude and devitalization, make three trials: first, bring the arm down with great force; second, bring it down languidly; third, let it fall of its own weight.

FIGURE 89. (*In fifth set.*) Stand with the heels together. Twist the body at the ankles and waist, at the same time allowing the muscles to so relax that the arms will be as limp as ropes and swing about aimlessly.

FIGURE 90. (*In sixth set.*) This is a very interesting exercise if done properly, especially to music. When a person is sleepy the head falls, because the muscles at the neck relax; when dizzy, the chest collapses; when exhausted, the waist muscles give way; when faint, the knees sink. Count *one* is used for the neck's relaxation; count *two* for the chest fall; count *three* for the waist; count *four* for the knees. Come back by four counts, and repeat.

The Artisans.



Fig. 91.



Fig. 92.



Fig. 93.



Fig. 94.



Fig. 95.



Fig. 96.

FIGURE 91. (*In first set.*) This is the action of climbing a ladder. The picture shows an imaginary one in dotted lines. You remain standing on the floor, but lift one foot after the other and one hand after the other so as to complete the illusion. Now add a strong muscular effort of foot and hand, as though your weight were entirely supported in this way. Count thirty-two.

FIGURE 92. (*In second set.*) The bell-ringer is herein reproduced. At first the body should take an ordinary standing position; then both hands should grasp an imaginary rope as the right foot takes a step right oblique forward. This is count *one*. On count *two* pull down with both hands on the supposed rope, letting the hands pass down to the left side near to the floor. The weight is forward for the preparation, but shifts to the left foot on the count.

FIGURE 93. (*In third set.*) In this action the anvil is to be imagined. The exercise should employ the right arm first, and then change to the left. The knee is the anvil, and the left fist upon the left knee is to receive the blow of the right fist for four counts, one for each blow; then the sides are reversed. The preparation is a slight step backward; the blow is accompanied by a long step forward.

FIGURE 94. (*In fourth set.*) This is the farmer mowing. Imagine that you have a large and heavy scythe handle in the hands, and swing the scythe to the right side slightly backward on count *one*, reaching out as far as possible. On count *two* mow down a great area of imaginary grass, swinging far to the left; on count *three* to the right again; and so on for thirty-two counts.

FIGURE 95. (*In fifth set.*) This is the profession of the pick-axe. One of the most graceful exhibitions of strength is seen in the uplifted attitude of the arms, ready to swing the pick. A critic of grace once declared the toiler in the mines to be the acme of graceful strength. With an imaginary pick it is most difficult to do. The counts are *one* for the uplifting of the arms, and *two* for the stroke; total to be thirty-two.

FIGURE 96. (*In sixth set.*) This is the profession of the shovel. The earth and shovel are to be imaginary, but the effort must be the height of the realistic. On the count *one*, stoop and take up a large quantity of heavy earth; on the count *two*, rise and throw it at least five feet away; stoop again on the count *three*; and so continue for thirty-two counts. It is well, in this as in all the exercises wherever possible, to exchange positions when the counts are half through, so as to use the other half of the body.

Imitation Exercise.



Fig.97.

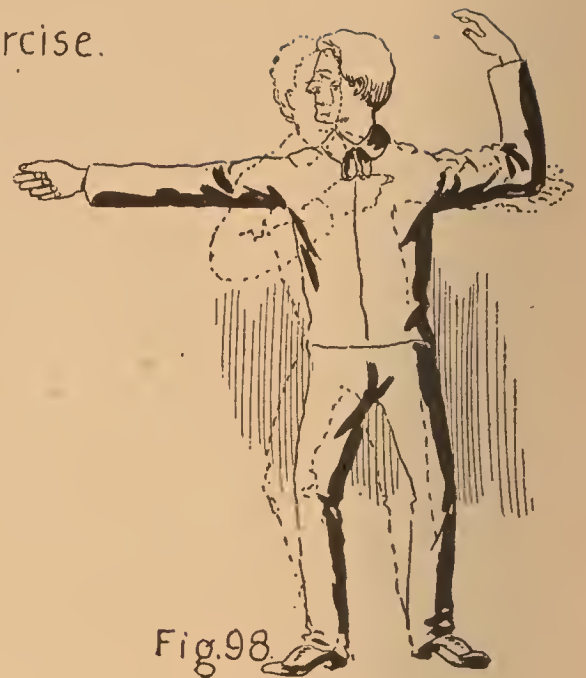


Fig.98.



Fig.99.

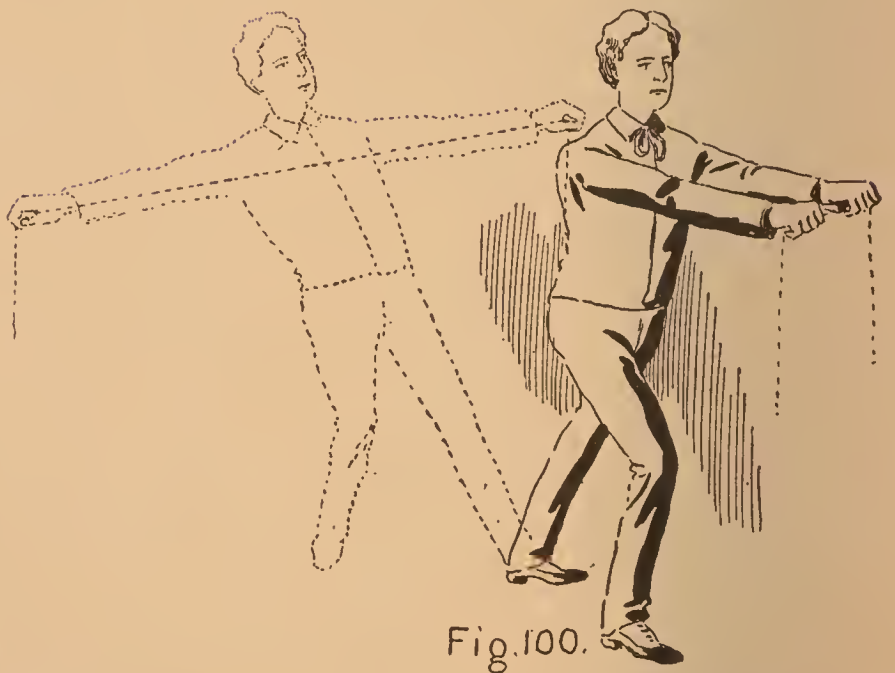


Fig.100.

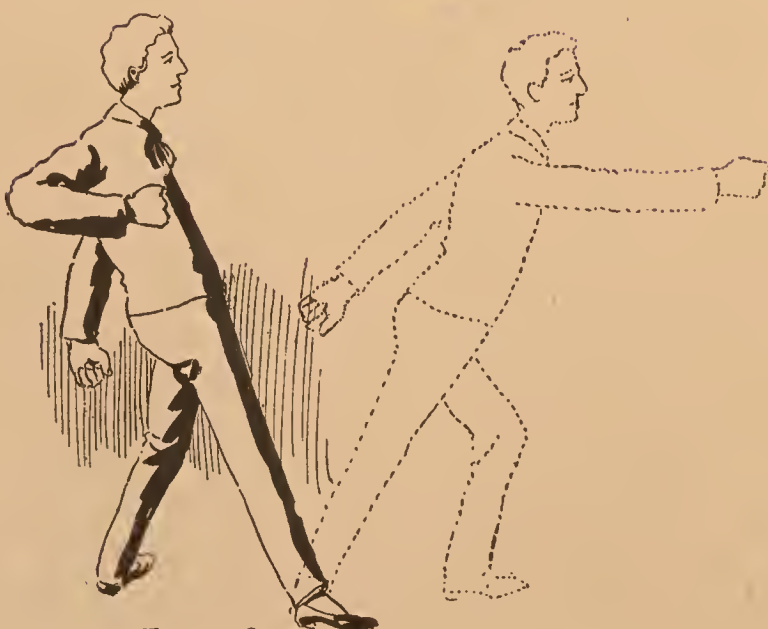


Fig.101



Fig.102.

FIGURE 97. (*In first set.*) This is an imitation of childhood, reproducing the hop and skip. No description can portray the movement; but it is safe to say that any person who ever indulged in this delight when young, will readily take the step as soon as the music is heard. The action is an onward one. Play is the secret of youth.

FIGURE 98. (*In second set.*) Here the fencer is imitated. He is supposed to hold a foil in his right hand and to uplift the left in the usual attitude of the duel. All this occurs on count *one*. On count *two* the imitation changes to that of the soldier in battle taking aim with his gun, which is supposed to be held at the left shoulder.

FIGURE 99. (*In third set.*) The remaining ten figures embrace merely drill exercises, designed to introduce the spirit of play into our work, with corresponding benefits. With the inspiration of good music, or of ensemble counting aloud, they are very enjoyable. The first of this series is an imitation of pushing. The wall in the picture is purely imaginary. On count *one*, endeavor with all your strength to push something from you; on count *two*, relax. Continue for thirty-two counts.

FIGURE 100. (*In fourth set.*) This is an imitation of stretching. On count *one*, lean forward and grasp an imaginary rubber or elastic band; on count *two*, transfer the weight from the advanced position to a retired one and at the same time open the arms with all the pretended vigor possible, as though actually stretching a rubber band of considerable strength. The imitation must be natural and vigorous.

FIGURE 101. (*In fifth set.*) This is an imitation of striking a blow. Make yourself believe that you are striking a very vigorous blow, and advance the body to do it. It is proper to advance either the right or left foot on the blow of either hand. Count *one* for preparation; *two* for the blow; and so on, making thirty-two counts, of which sixteen will be with each hand.

FIGURE 102. (*In sixth set.*) This is an imitation of pulling. It is the opposite of Figure 99, and quite different from Figure 100, the latter being a lateral action of stretching. Stand; brace the legs hard; pull as energetically as possible without moving from your position. On the pull count *one*; relax for count *two*; and continue for thirty-two counts.

TO TEACHERS.

As we have fully stated in works that lead up to this, the successful teacher of physical culture, or of any other branch of education requiring the direction of important classes, must possess four leading qualifications:

1. **Executive ability.** That is already denoted by the fact that you have reached the Tenth Star Degree.

2. **A knowledge of the work** involved in what you teach. This book contains such knowledge as far as the system of Ralston Culture is concerned.

3. **Powers of address**, including a good voice, perfect enunciation, pleasant modulation and skilful speech, all of which inspire courage and control of self and others. All this may be acquired by a six months' course of training in Ralston University of Expression, of Washington, D. C., the leading institution of its kind in existence. Catalogue may be had on application. Besides the education obtained in expression, the University License to teach the Ralston System of Physical Culture is obtainable in no other way than by a six months' course of training there.

4. **Magnetism** is of the greatest importance in securing success. There are two courses of training in this art; one is found in the Exercise Book of Personal Magnetism, new seventh edition, now in press; the other is the vastly comprehensive course of private lessons showing the various ways of using the power, entitled "Universal Magnetism." The first book is a very low priced work, and contains the complete system of the cultivation of personal magnetism. The latter book is high priced and is devoted to private training in the use of the power. It is not by any means necessary, but is a very valuable aid to those who can afford to take private instruction. Both these courses may be obtained free in the degree system of the Ralston Natural College, which is a home course of special training. To enter such College it is necessary to use the "Gold Form" at the end of this volume. Kindly read the final chapter of this book, where every matter is fully explained relating to all the particulars mentioned on this page. If you are limited in means you could easily take all the courses except that in Ralston University at Washington; and more than one pupil has earned that by teaching Ralston Physical Culture.

SECOND DEPARTMENT.

Numerical Order of MUSIC AND EXERCISES.

In the preceding pages the various series, seventeen in all, have been presented in full page arrangement. This is necessary in order that the practicer may be able to see at a glance what are included in each group; and short descriptions accompany the whole series on the opposite page of each, so that a sufficient though brief knowledge may be at once obtainable of the purport of the movements and the way of performing them. In fact, this preceding arrangement has for many years constituted the only presentation we have made of Ralston Physical Culture.

More explicit descriptions have been demanded; and, above all, the MUSIC has been so often requested that we have determined to publish it; but this has not been done until every air has been tested, tried repeatedly and found to coincide exactly with the minutest details of the exercises. This of itself has entailed a vast amount of labor and experimenting upon a body of teachers and musicians, and has been no easy task in any part of the work. We here present the numerical order because it is needed for reference. At one time there were spurious publications of our music which were sold as high as fifty dollars and one hundred dollars per copy, full of defects even at that; and the arrangement was made in the teaching order, running in SETS; but this prevented special reviews and the use of the gems of the system, as it was almost impossible to use the music when so arranged.

Later on in the book the teaching order will be added accompanied by the same music again, but arranged so that each exercise and its own music are together side by side. Any other plan would be fatal to the success of a teacher. The drag and waiting to find a page, the constant search or even the turning of leaves a hundred times during a lesson, would not be tolerated by a class. The teacher and musician must be prompt at every stage, so that the class need not be annoyed by delay.



FIG. 103. IRON LEGS.

FIGURE 1 ENLARGED.—*Explanation:* The purpose of these extended descriptions of the exercises is to make clear to the student of this course the finest details of action connected with the movements. It was proper that a whole series should appear together on a single page, so that the eye might discern and compare the different phases of the system as far as it applies to each part of the body. Here a whole page is devoted to a single exercise which is seen in enlarged form, and is followed by a clearer explanation than can be crowded into a small space. The music is then placed directly opposite for the greatest convenience to teacher and musician. The Iron Legs series begins with a very gentle exercise. The best way of performing it is to give a swinging motion to the body, dipping back a little as the knees bend forward, and pitching the head slightly forward as the knees are straightened. The pleasure is very great if there is no jerk or jar in the action.

Figure 1.

IRON LEGS.

FIRST SET.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a 2/4 time signature, featuring a melody of eighth and sixteenth notes. The lower staff is in bass clef, providing a harmonic accompaniment with chords and moving lines. Pedal markings are present: 'Ped.' under the first measure, an asterisk under the third measure, 'Ped.' under the fifth measure, and another asterisk under the seventh measure.

The second system continues the piece. It features similar melodic and harmonic patterns. Pedal markings include an asterisk under the second measure, 'ff Ped.' under the fourth measure, and an asterisk under the sixth measure.

The third system of musical notation shows further development of the musical themes. Pedal markings are placed at the beginning ('Ped.'), under the second measure (asterisk), under the fourth measure ('Ped.'), under the sixth measure (asterisk), and at the end (asterisk).

The fourth system of musical notation continues the sequence. Pedal markings are located at the beginning ('Ped.'), under the second measure (asterisk), under the fourth measure ('Ped.'), and under the sixth measure (asterisk).

The fifth system of musical notation features a 'ff Ped.' marking under the fourth measure, indicating a fortissimo pedal point. Asterisks are placed under the second and sixth measures.

The sixth and final system of musical notation concludes the first set. It includes pedal markings at the beginning ('Ped.'), under the second measure (asterisk), under the fourth measure ('Ped.'), under the sixth measure (asterisk), and at the end (asterisk).



FIG. 104. IRON LEGS.

FIGURE 2 ENLARGED.—*Explanation:* It is supposed that you have gone through all the seventeen exercises of the first set, and are now ready to take up those that are slightly harder in the second set. It is the purpose of this system to wait till the muscles are getting more used to the work and practice before giving them a full test of endurance. There is no good reason why the body should be made stiff and sore uselessly. The first set passed from the gentlest of the leg exercises to those of the feet, then the ankles, and so on up the entire body; all being the easiest to do, yet each having a distinct value in reaching muscles and making them ready for greater tests. We now are at the beginning of the second set; having a very pleasant and important exercise claiming our attention. It is best done by acquiring that smoothness of action that admits of no jar. With the feet apart, say three-quarters of a yard, sway to the right and to the left, bending the knee to admit the slight lowering of the body in each direction, and save yourself from a sudden stopping by giving a spring of the least force, so as to catch the weight and reverse the direction. Herein the beauty of the movement is attained, and the pleasure is increased.

Figure 2.

IRON LEGS.

SECOND SET.

This musical score is for a piece titled "IRON LEGS. SECOND SET." It is written for piano in 3/4 time, with a key signature of one flat (B-flat). The score consists of seven systems, each with a grand staff (treble and bass clefs). The first system begins with a mezzo-forte (*mf*) dynamic marking. The melody in the treble clef features a mix of eighth and sixteenth notes, often beamed together, and includes several rests. The bass clef accompaniment is primarily composed of chords and single notes, providing a steady harmonic foundation. The piece concludes with a double bar line and repeat signs in the final system.



FIG. 105. IRON LEGS.

FIGURE 3 ENLARGED.—*Explanation:* This is another very interesting exercise if it is properly performed. It differs from Figure 1 in that it has a slide or lateral action, while the first figure has a forward and back movement. Stand with the feet touching; the military attitude is the best. The feet are to be placed together and the heels are to touch, while the toes are turned out as much as possible. From this position to begin with almost any change may be easily made. On count *one* of the music, which means the first accented note, the legs should be spread apart at the knees only, but not at the feet. On count *two*, which means the second accented note of the music, the knees are to be brought together so as to touch. On count *three* the knees are to be spread apart laterally as in count *one*, and so on till the teacher thinks the action has continued long enough. Thirty-two is a very good number of counts, for it suits the music almost invariably and gives the counts right for all uses. A variation is found in the blending of the action of Figure 1 with this as follows: On count *one*, bend the knees forward; on count *two*, bend them back; on count *three*, open the knees laterally; on count *four*, shut them together again.

Figure 3.

IRON LEGS.

THIRD SET.

This musical score is for a piano accompaniment piece titled "IRON LEGS. THIRD SET." It is written in 2/4 time and consists of six systems of music. Each system contains a treble and bass staff joined by a brace. The treble staff features a melodic line with eighth and sixteenth notes, including some slurs and a sharp sign. The bass staff provides a harmonic accompaniment using chords and single notes. The piece concludes with a double bar line at the end of the sixth system.



FIG. 106. IRON LEGS.

FIGURE 4 ENLARGED.—*Explanation:* This exercise commences the fourth set, and each of the movements in this set will be found harder than any that have been given in the use of the particular part of the body involved. We are trying to strengthen the legs first, for they are to be used in supporting the whole body, and upon them the greatest demand is always made. The above exercise is capable of any variation in degree of energy required that the performer chooses to put into the effort. For instance, if you lower the body an inch at the first trial, you will scarcely perceive any tax on the powers of the legs. But if you lower it three inches there is a decided difference in its effect, not only upon the limbs, but on the whole body. We advise that it be first done with the least possible dip on the body; then let the pupil decide how far to go in the descent after the danger of lameness has passed, which is about the fourth time of continuous practice in as many different days. But a reckless plunging into action always results in unnecessary pain through lameness and stiffness. Some are ambitious to get ahead, and really lose time by not going slowly at first. The teacher must continually admonish the pupil against this thoughtlessness. Any quick or unusual motion of a muscle that strains it will produce soreness that will not heal for a week or more.

Figure 4.

IRON LEGS.

FOURTH SET.

One

two

one

two

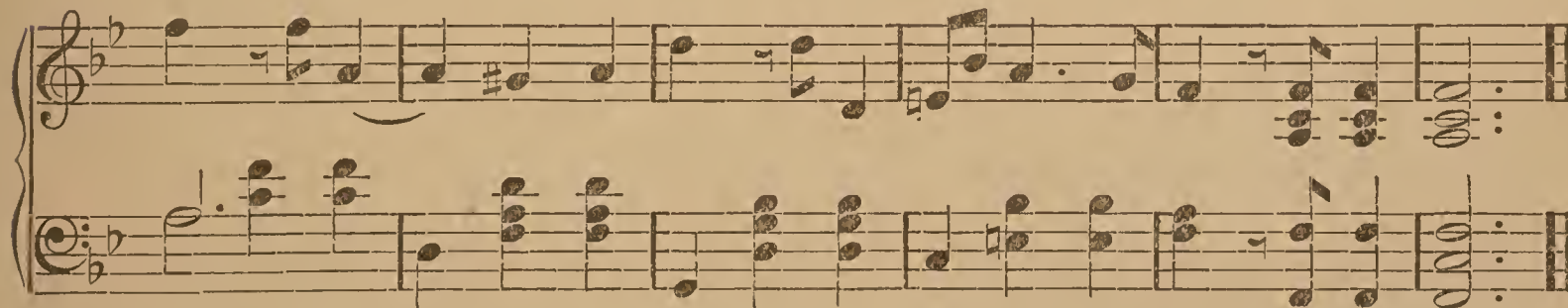
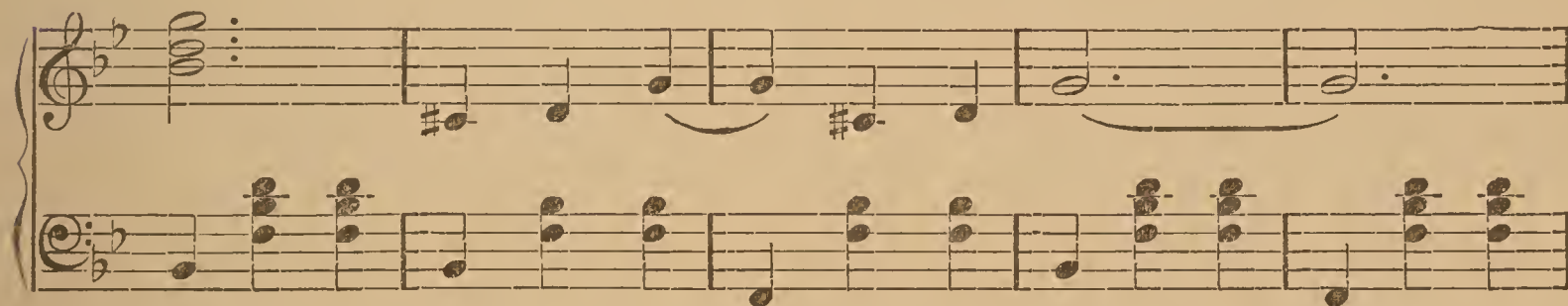
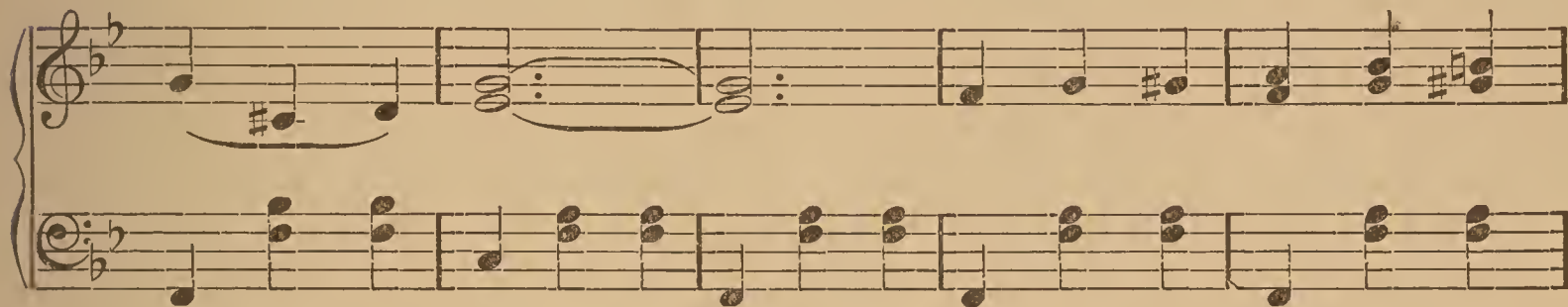
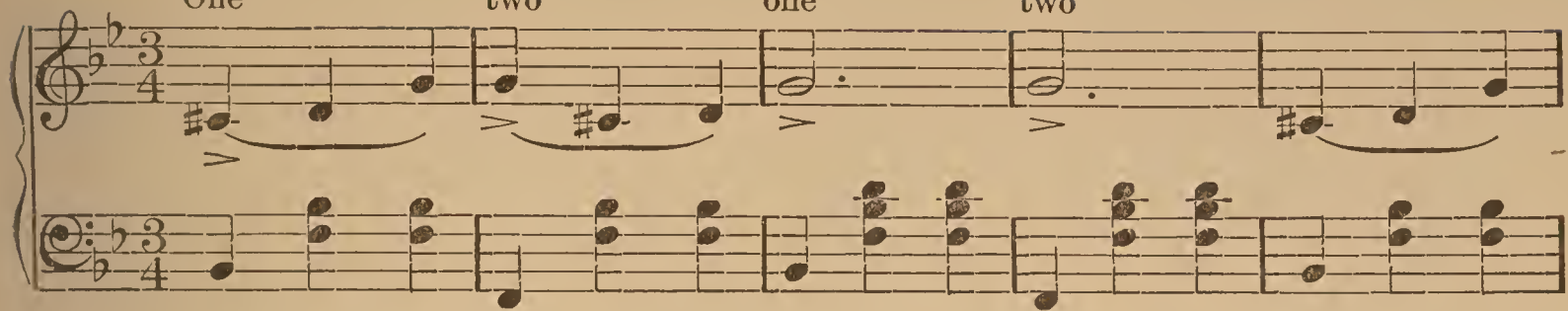




FIG. 107. IRON LEGS.

FIGURE 5 ENLARGED.—*Explanation:* Here the fifth set begins, and the work is getting much harder. The exercise above pictured is a very simple one to look at, but it is hard to long perform. The first few movements are quite easy, and if the practice were to stop with a half dozen of them, there would be no knowledge of what the exercise is intended for. On count *one* the weight is to be placed on the right foot moved out to a lateral direction as in Figure 2. The main difference is in the fact that the left foot is to be raised from the floor at the same time, while in Figure 2 it remained on the floor and helped to sustain the body. On count *two* in the present movement the weight is to be passed over to the left side and on the left foot, the knees of that limb being bent, and the right leg being raised from the floor. A very good way of learning the exercises is to begin with Figure 2, and change very easily from that to this by lifting the free foot from the floor each time. It must be purely a lateral movement, and not at all a front or oblique one. The tax on the muscles may be greatly increased by raising the free foot higher each time.

Figure 5.

IRON LEGS.

FIFTH SET.

One two one two one two

The first system of musical notation is in 3/4 time and B-flat major. The treble clef staff features a melody with eighth notes and dotted half notes, accented with 'One' and 'two'. The bass clef staff provides a harmonic accompaniment with chords and single notes. A dynamic marking of *mf* is present at the beginning.

one two

The second system continues the melody and accompaniment. It includes repeat signs and a double bar line. The treble clef staff has some notes marked with an 'x'.

The third system continues the piece. A dynamic marking of *f* appears in the middle of the system. The treble clef staff shows a melodic line with some grace notes.

The fourth system continues the musical piece. The treble clef staff features a melodic line with a double bar line and repeat signs.

The fifth system is the final system on the page. It concludes the piece with a final cadence in the treble clef staff and a final accompaniment line in the bass clef staff.



FIG. 108. IRON LEGS.

FIGURE 6 ENLARGED.—*Explanation:* Here we commence the sixth and last set. Naturally you will expect the hardest of all the exercises in Iron Legs to be found at this place; and we will take the liberty of asking you if your expectation is not realized. Yet no strain occurs at any part of the system. It is necessary to produce weariness, for there can be no improvement in health and no acquiring of strength without weariness. One of the best means of getting immediate improvement is to go so far as to completely exhaust the strength each day, but not to strain any part of the body, and then take a full hour's rest, during which the strength will come back in greater amount. This cannot be done where a person is subject to heart disease. The above exercise requires an unusual degree of power in the legs; so much, in fact, that most persons say at first that it cannot be done. A rough floor will prevent one's doing it easily even when strong enough. On count *one* spread the feet apart by a jump, and on count *two* draw them together by sliding them over the carpet or floor. If the movement is too hard, place most of the weight on one leg.

Figure 6.

IRON LEGS.

SIXTH SET.

One two one two

This musical score is for a piece titled "IRON LEGS. SIXTH SET." in 3/4 time. The notation is arranged in six systems, each with a grand staff (treble and bass clefs). The key signature has one flat (B-flat). The score includes various musical notations such as notes, rests, beams, and dynamic markings. The first system includes the tempo markings "One" and "two" above the first and second measures respectively. The second system includes a repeat sign. The third system includes a repeat sign. The fourth system includes a forte marking "f". The fifth system includes a fortissimo marking "ff". The sixth system includes a repeat sign. The score concludes with a double bar line and repeat signs.



FIG. 109. FOOT EXERCISE.

FIGURE 7 ENLARGED.—*Explanation:* Here we come to the second exercise of the first set. The first exercise is found in Figure 1, and related to the legs. This relates to the feet. The object is to pass from one to the other part of the body, so as to give each set of muscles attention, and then to relieve it by going to another set, until the whole body has been thus dealt with. While one is resting the other is being made tired, but the whole body is not affected at the same time, until we come to movements designed to test the united strength of all the sets of muscles in one action. The relief of the legs is at once secured by using only a part of their muscles, even when standing on them after they have been taxed. This seems strange until it has been tried. The above movement consists in raising and lowering one foot while the body stands on the other. There is really no tax on the leg muscles out of the ordinary use for standing, but there is severe tax on the foot that sustains the whole weight while any movement is going on. The good of the action is not imparted to the foot that is made to move, but upon the other that must steady the whole weight under the excitement of the action.

Figure 7.

FOOT EXERCISE.

FIRST SET.

One two one two

ff

p

ff

ff

ff

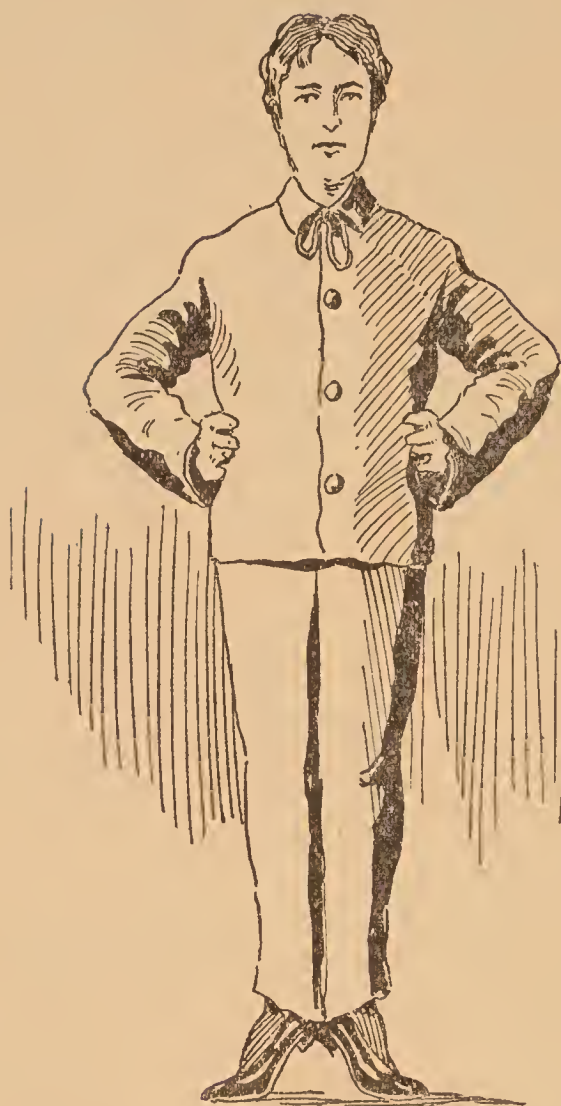


FIG. 110. FOOT EXERCISE.

FIGURE 8 ENLARGED.—*Explanation:* This is the second of the exercises in the second set. It is very simple to understand and to perform, but it is specially tiring and effective in developing unusual strength of the feet. It has been stated that the muscles of the feet have to do the work of supporting the whole body. This is not fully true. The feet may be quite weak in muscular power and yet sustain the body, while the legs may have much more to do, and may get tired much sooner. It is well known that we feel weary in the muscles of the legs before we do in the feet. The latter need their strength when active rather than when standing still. The legs are wearied more by having to stand still than by walking or running, after once one is used to either exercise. When these parts are made extra strong it is always a delight to walk, to run or even to stand still. The poet Longfellow found his mind more active and wholesome when he was on his feet and he stood by his desk for hours writing. The above movement may be made light or heavy by the degree of rise given to the body.

Figure 8.

FOOT EXERCISE.

SECOND SET.

The first system of musical notation for Figure 8, Second Set. It consists of a grand staff with a treble and bass clef. The key signature is one sharp (F#) and the time signature is 3/4. The treble staff begins with a piano (*p*) dynamic and a slur over the first two measures. The bass staff features a series of chords and single notes, starting with a whole rest in the first measure.

The second system of musical notation. The treble staff starts with a piano (*p*) dynamic and a crescendo hairpin leading to a forte (*f*) dynamic. The bass staff continues with a sequence of chords and notes.

The third system of musical notation. The treble staff features a piano (*p*) dynamic and a crescendo hairpin leading to a forte (*f*) dynamic. The bass staff continues with a sequence of chords and notes.

The fourth system of musical notation. The treble staff begins with a half note, followed by a slur over the next two measures. The bass staff continues with a sequence of chords and notes.

The fifth system of musical notation. The treble staff starts with a piano (*p*) dynamic and a crescendo hairpin leading to a forte (*f*) dynamic. The bass staff continues with a sequence of chords and notes.

The sixth system of musical notation. The treble staff begins with a half note, followed by a slur over the next two measures. The bass staff continues with a sequence of chords and notes, ending with a double bar line.



FIG. 111. FOOT EXERCISE.

FIGURE 9 ENLARGED.—*Explanation:* The inquiry has often been made by pupils why the use of one foot or leg in exercise will impart more strength than the use of two. The answer should be foreseen by every person who has thought about it. When a body that weighs a hundred pounds is supported on both feet, each foot has but fifty pounds to sustain. When such a body is supported on one foot only, that foot has one hundred pounds to sustain, and the more tax we place on the muscles the more they will grow in strength if they are given a chance to recuperate by rest. For this reason frequent rests are necessary in scientific physical training. In the above exercise the whole weight of the body is not only placed on one foot, but it is made to rest on the forward support. This is done so easily that it will hardly be noticed, if the musical action is followed. On count *one* raise the free foot first and let its upward action or acquired momentum pull the weight off the heel of the strong foot, and thus raise the whole body by the toes of one foot. In doing this the degree of elevation will determine the amount of tax to be placed on the latter.

Figure 9.

FOOT EXERCISE.

THIRD SET.

One two one two

The musical score for Figure 9, Third Set, Foot Exercise, is written in 3/4 time and the key of D major (indicated by two sharps). The score consists of 16 measures, divided into two systems of eight measures each. The right hand (treble clef) plays the melody, and the left hand (bass clef) provides the piano accompaniment. The melody begins with a half note G4, followed by a quarter note A4, and then a half note B4. The piano accompaniment consists of chords and single notes. The score includes various musical notations such as slurs, accents, and a fortissimo (f) marking. The score ends with a double bar line and repeat signs.



FIG. 112. FOOT EXERCISE.

FIGURE 10 ENLARGED.—*Explanation:* This is a very hard movement for one who has not taken the preceding exercises in this series. It should not be undertaken until all the three sets have been well mastered and the laming period is fully past, for the feet will not gain any strength by forcing them to do what they are not yet able to properly perform. Poise is one of the best tests of power in the muscles of the feet. To walk a straight line, or a crack in the floor, or a rail or rope, requires such strength in the pedal extremities as will sustain the body without the least weariness of the feet. Indeed, the tax should never be recognized there, but the whole body should give way first to exhaustion. The above movement requires the best of poise on one leg while the other is raised and the foot made to describe a circle, as though the toes were tracing it in the air. At first the circle should be very small in diameter, and may be increased as the power of sustaining the body is made greater. Circle to the right on eight counts, or as many as the teacher may direct; then to the left; then reverse by standing on the other foot and making right and left circles as stated.

Figure 10.

FOOT EXERCISE.

FOURTH SET.

One two three four

f

five six

1 2 3

The musical score is written for piano and voice. It is in 3/4 time and the key of B-flat major. The piano accompaniment consists of a steady bass line with chords. The vocal melody is written in the treble clef. The score is divided into six systems. The first system is marked 'f' (forte). The second system has a 'five' and 'six' marking. The third system has a '1 2 3' marking. The fourth system has a '1 2 3' marking. The fifth system has a '1 2 3' marking. The sixth system has a '1 2 3' marking.



FIG. 113. FOOT EXERCISE.

FIGURE 11 ENLARGED.—*Explanation:* This is much harder than the preceding movements in this exercise if properly performed. It requires that the weight be kept entirely on the strong foot and none of it placed on the other while the circle is being described. There are many variations possible with this action. In the first place, the music may be fast or slow. Then the circle may be to the right or to the left. The change from one foot to the other should be in counts of eight; thus, make eight circles with the right foot and then eight with the left, then eight with the right, and so on for thirty-two counts, unless the teacher decides that more are necessary in order to sufficiently tax the muscles. The greatest opportunity for variation is in the size of the circle to be described. If it is of small diameter, then the center of gravity is not drawn far from the other foot and the test of strength is not as great. As the circle is enlarged the effect is quickly felt by the strong foot, and the temptation to place part of the weight on the moving foot is increased. The circle should be a graceful and sweeping one, not quick, short and jerky.

Figure 11.

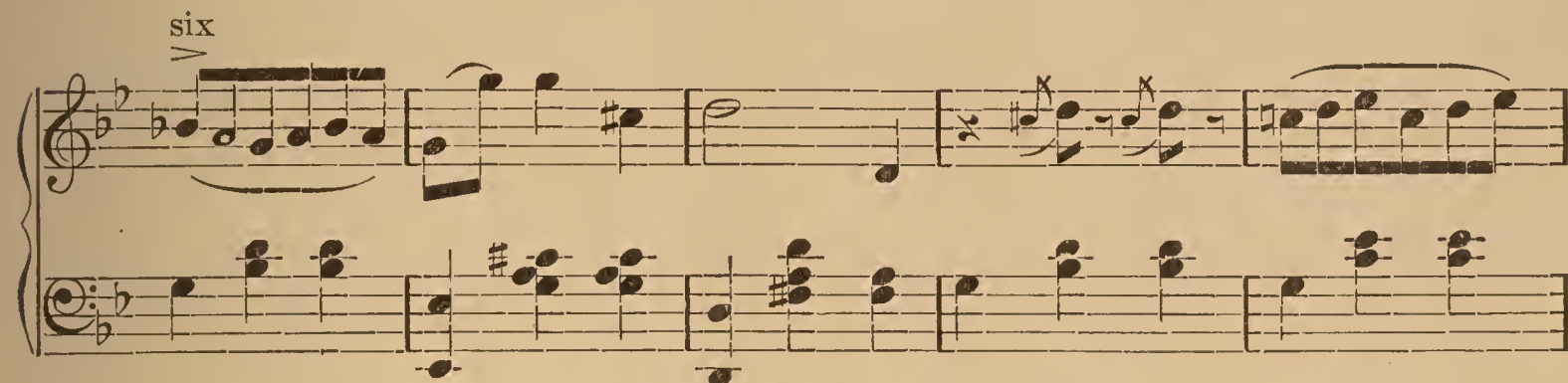
FOOT EXERCISE.

FIFTH SET.

One two three four five



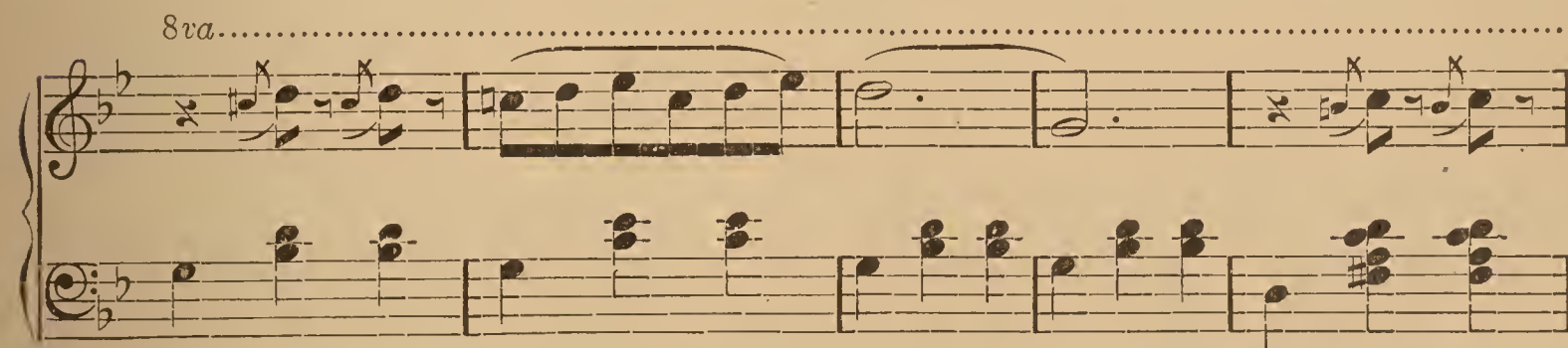
six



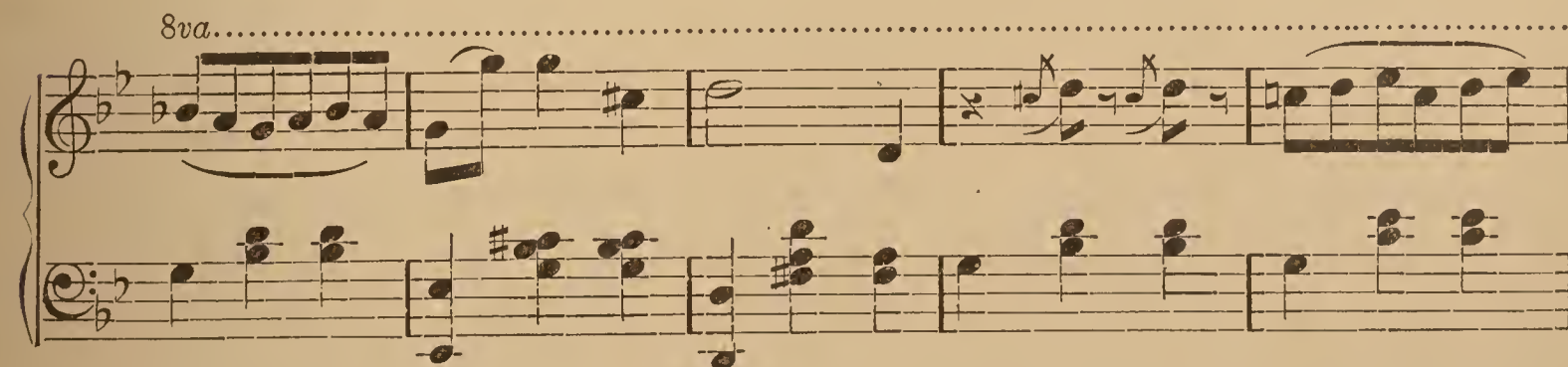
ff



8va.....



8va.....



8va.....

ff

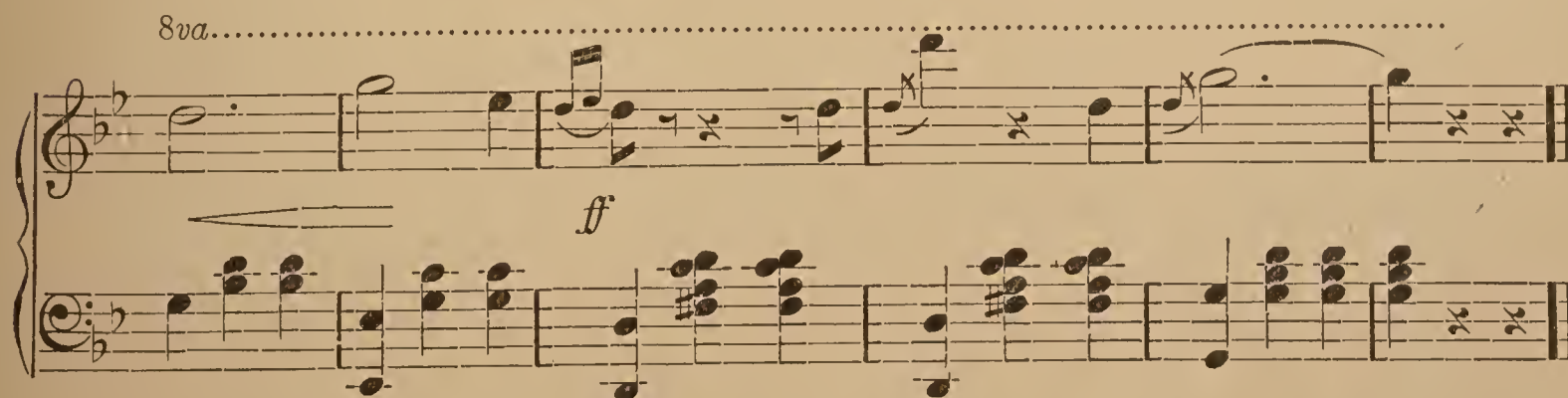




FIG. 114. FOOT EXERCISE.

FIGURE 12 ENLARGED.—*Explanation:* The purpose of most of the foot exercises is to strengthen the muscles of one foot at a time; and, while the other foot may be doing all the work, the first is getting all the benefit. It does not add to the power of the foot to move it about as in the last figures of this series; the tax is made upon the other, which sustains the weight. In the present exercise, which is the most difficult in this series, the first count should carry the foot straight ahead a few inches. The second count should carry it around in a semicircle to a point a short distance from that which it first occupied. The third count brings it up from this rear point to the place where it began, and the fourth count is lost. By this is meant that the foot rests while the music finishes the accent. This allows the body to be restored to perfect equilibrium. The exercise is to be varied by extending the length of the forward movement and giving the foot a larger sweep in the semicircle. Each foot should be used for four complete movements. Then repeat.

Figure 12.

FOOT EXERCISE.

SIXTH SET.

One two

front back front back

The musical score is written for piano in 6/8 time. It consists of six systems, each with a treble and bass staff. The first system is labeled 'One' and 'Two' with 'front' and 'back' foot positions. The score includes various musical notations such as notes, rests, and dynamic markings. The key signature is one flat (B-flat). The first system has a treble staff with a 6/8 time signature and a bass staff. The second system has a treble staff with a 6/8 time signature and a bass staff. The third system has a treble staff with a 6/8 time signature and a bass staff. The fourth system has a treble staff with a 6/8 time signature and a bass staff. The fifth system has a treble staff with a 6/8 time signature and a bass staff. The sixth system has a treble staff with a 6/8 time signature and a bass staff.



FIG. 115. ANKLE EXERCISE.

FIGURE 115 ENLARGED.—*Explanation:* In this movement there is a tendency on the part of pupils to disregard the necessity of maintaining exact positions of the feet, and thus much of the benefits intended may be lost. The best position to begin from is the military attitude; the heels together and the toes pointing obliquely outward. On count *one* cross the right leg in front of the left, placing the toes together and the heels apart in the shape of the letter **V** reversed, or **A** with the bar removed thus, **Λ**. On count *two* put the left leg in front of the right leg by swinging it around, and make a new angle in the same shape, **Λ**. On count *three* swing the right foot around in front of the left, as on count *one*. These swinging steps should coincide exactly with the rhythm of the music to avoid a jerky or jarring action. At no time should the poise be disturbed. The body may be kept over its gravity point by graceful adjustments of the body at each movement.

Figure 13.

ANKLE EXERCISE.

FIRST SET.

One two one two one two

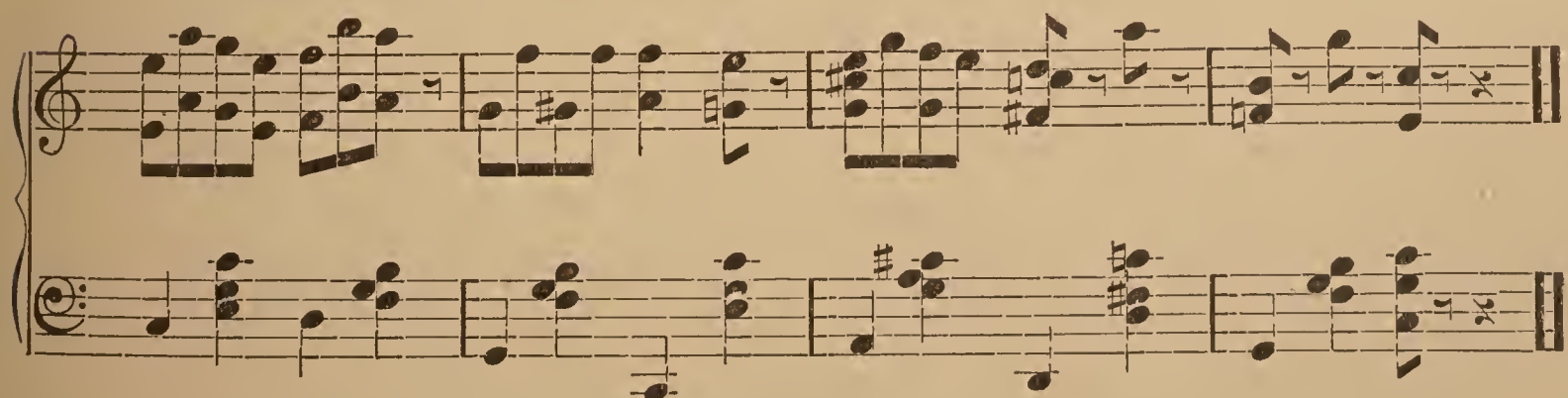
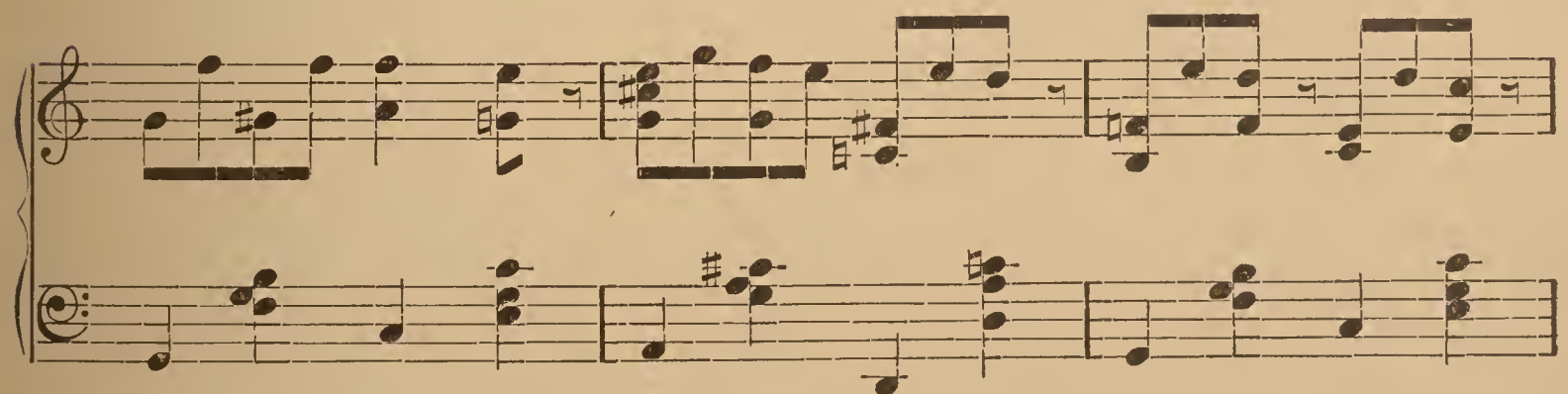
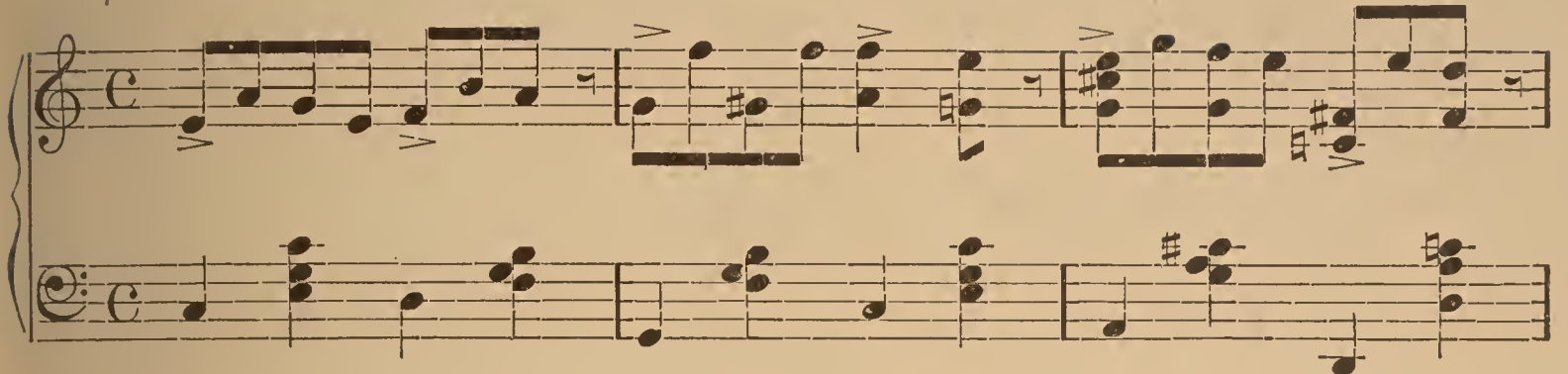




FIG. 116. ANKLE EXERCISE.

FIGURE 14 ENLARGED.—*Explanation:* This is called the rocking action of the feet. It is easily performed, but soon shows its good qualities by wearying the muscles of the ankles and imparting great strength to them. It is best to commence all movements alike, if possible, and the pupils should perform the details simultaneously. In this action the toes should carry the weight of the entire body on count *one*, and the heels may be raised slightly or very far up, as the pupils choose or the teacher directs. On count *two* the heels come down and the toes are raised on the same accent of the music. Here is a double action that should be done as one movement and not two. The raising of the toes brings the support upon the heels, where the base is limited; hence the poise is uncertain. To maintain it requires extra strength at the ankles. The rocking may be very gentle or very pronounced, as the pupil decides to make it; but it should be gentle at all times and smoothly performed.

Figure 14.

ANKLE EXERCISE.

SECOND SET.

One two one two

p Dolce.

mf



FIG. 117. ANKLE EXERCISE.

FIGURE 15 ENLARGED.—*Explanation:* The present movement is very interesting and beneficial. There are several ways of using it. For mere pleasure we would suggest that the pupil should go to the right on eight counts, then to the left on as many more, bringing the feet back to the place of beginning. On count *one* move the heels to the right; on count *two* move the toes to the right; on count *three* move the heels to the right; on count *four*, the toes to the right; and the *eighth* count will end with the toes to the right. On returning it will be necessary to move the toes to the left on the *ninth* count; the heels to the left on the *tenth*, and so on to the end. In one method the feet may be close together; in another, the length of movement of the toes may be slight; in another, the feet may be separated as much as you choose; in another, the action may be larger, and the distance will be greater from count *one* to count *eight*. Then the pupils may go around the hall, all in one circle, in which case count *one* should move the toes and count *two* the heels.

Figure 15.

ANKLE EXERCISE.

THIRD SET.

One two one two one two

The musical score is written for piano in 6/8 time, featuring a treble and bass staff. The key signature has one flat (B-flat). The piece is divided into three systems, each with two staves. The first system includes dynamic markings *p* and *f*, and articulation marks above the first staff. The second system includes *f* and *p*. The third system includes *mf* and *f*. The score concludes with a double bar line in the final measure of the third system.



FIG. 118. ANKLE EXERCISE.

FIGURE 16 ENLARGED.—*Explanation:* This is a striking movement. To begin it place the left foot in front of the right, so that the toes of the latter will cross the heel to the left of the left foot. On count *one* the ankle or lower half of the right leg will strike the left leg from behind. On count *two* the right leg will rise on the toes of its foot, using the latter for leverage, and pry the left foot forward several inches. On count *three* the blow will be repeated, and on count *four* it will be followed by the prying action. So continue for eight counts. Then, on count *nine*, let the left foot strike the right a blow; on count *ten* the left foot will pry the right backward; on count *eleven* it will strike another blow; and so on until the starting position has been reached. Now comes an important change. On count *seventeen* the left foot is to swing around behind the right and strike it a forward blow; then the next count will pry the right foot forward, and the same movements will be repeated until the thirty-second count has been reached.

Figure 16.

ANKLE EXERCISE.

FOURTH SET.

This musical score is for a piano exercise titled "ANKLE EXERCISE. FOURTH SET." It is written in 6/8 time and consists of five systems, each with a treble and bass staff. The key signature has one flat (B-flat). The exercise features a continuous eighth-note accompaniment in the bass staff and a more complex melody in the treble staff. The melody includes various rhythmic patterns, including eighth and sixteenth notes, and some slurs. The piece concludes with a double bar line at the end of the fifth system.



FIG. 119. ANKLE EXERCISE.

FIGURE 17 ENLARGED.—*Explanation:* Take the military position to commence with. On count *one* place the weight forward on the toes, at the same time swinging the heels out laterally. In the early practice it is best to make a narrow letter *V*, until the full action is understood. On count *two* bring the heels together in the first or military position. As the music should be played quickly, this alone will soon weary the muscles of the ankles. By and by let the heels be thrown outward in a wider position of the *V*; and in time the heels may be swung so far around that the feet will make a straight line, the toes touching. This is a severe test on the strength of the ankles. It is not allowable in this movement to raise the heels at all. They should be kept to the floor all through the practice. A quite rhythmic action indicates grace and good poise.

Figure 17.

ANKLE EXERCISE.

FIFTH SET.

Play fast.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a 6/8 time signature. It begins with a series of dotted eighth notes, followed by a measure with a double bar line and a repeat sign. The lower staff is in bass clef with a 6/8 time signature and a dynamic marking of *mf*. It contains a continuous sequence of eighth notes, mostly beamed in pairs, with some triplets indicated by a '3' over the notes.

The second system of musical notation consists of two staves. The upper staff is in treble clef and contains a series of eighth notes, some beamed in pairs. The lower staff is in bass clef and contains a continuous sequence of eighth notes, mostly beamed in pairs.

The third system of musical notation consists of two staves. The upper staff is in treble clef and contains a series of eighth notes, some beamed in pairs. The lower staff is in bass clef and contains a continuous sequence of eighth notes, mostly beamed in pairs.

The fourth system of musical notation consists of two staves. The upper staff is in treble clef and contains a series of eighth notes, some beamed in pairs. The lower staff is in bass clef and contains a continuous sequence of eighth notes, mostly beamed in pairs.

The fifth system of musical notation consists of two staves. The upper staff is in treble clef and contains a series of eighth notes, some beamed in pairs. The lower staff is in bass clef and contains a continuous sequence of eighth notes, mostly beamed in pairs. The system concludes with a double bar line and a repeat sign.



FIG. 120. ANKLE EXERCISE.

FIGURE 18 ENLARGED.—*Explanation:* This ought to be associated with the light step movements, but its great value in imparting strength to the ankles makes it a more important exercise in this connection. It is by far the hardest of the ankle series. Seemingly it is like Figure 17, but its action proves quite different. The main characteristic is in the raising of the heels as they are turned out on the second, fourth and all even-numbered counts. At no time should the heels touch the floor. In the early practice it is best to raise them but slightly, and turn them out as little as possible while keeping a distinct action. Later on turn the heels out more and more, and raise them higher and higher, until, finally, the whole body is on the jump. You will catch the spirit of the music, but the sensation is so pleasurable that you will overtax your strength before you know it, as is too often the case in the ball-room.

Figure 18.

ANKLE EXERCISE.

SIXTH SET.

One two one two

The musical score is written for piano and consists of five systems. Each system contains a treble staff and a bass staff. The key signature is one flat (B-flat), and the time signature is 4/4. The music is an ankle exercise, featuring various rhythmic patterns and triplets. The first system includes the words 'One two one two' above the treble staff, with 'One' and 'two' placed over specific notes. The score ends with a double bar line and a repeat sign.



FIG. 121. KNEE EXERCISE.

FIGURE 19 ENLARGED.—*Explanation:* The series of knee movements, while fully as pleasant as those of the preceding series, and much more artistic, will test the powers of the special muscles more than any others. The knees are the centers of muscular sets that are always giving way, and need as much attention even as the lungs. We never realize how weak the knees are, in fact, until the health gives way or the mind is affected. The term, “weak-kneed,” is a true one, and applies to the mental, moral or physical character of the individual. In fright or timidity the knee muscles are actually weaker than in courage or calmness. Old age first gives way at the knees, then at the neck and waist. We believe that any person may be trained to so carry the body that a firm and erect attitude may be maintained at the age of a hundred years, if one lives so long. The above exercise is connected with others that follow, and will be considered with them. See Figure 122.

Figure 19.

KNEE EXERCISE.

FIRST SET.

One

two

three

four

five

Measures 1-5 of the first set. The music is in 3/4 time. The right hand features a melodic line with slurs and accents, while the left hand provides a harmonic accompaniment with chords. Dynamic markings include *mf* (measures 1-3) and *f* (measures 4-5).

six

Measures 6-10 of the first set. The right hand continues the melodic pattern. A *mf* dynamic marking is present in measure 8. The system concludes with a double bar line.

Measures 11-15 of the first set. The right hand features a descending melodic line. The left hand accompaniment includes a key signature change to one flat (B-flat) in measure 14. The system ends with a double bar line.

Measures 16-20 of the first set. The right hand has a melodic line with slurs and accents. Dynamic markings include *mf* (measures 16-18) and *f* (measures 19-20). The system ends with a double bar line.

Measures 21-25 of the first set. The right hand continues the melodic pattern. A *mf* dynamic marking is present in measure 23. The system concludes with a double bar line.

Measures 26-30 of the first set. The right hand features a descending melodic line. The left hand accompaniment includes a key signature change to one flat (B-flat) in measure 28. The system ends with a double bar line.



FIG. 122. KNEE EXERCISE.

FIGURE 20 ENLARGED.—*Explanation:* This is like the movement of Figure 121 (which see), except that the body moves to the side instead of to the front. We will discuss the two together at this place. It is of the highest importance that the pupil should learn to bring the heels together in the military position, which keeps the feet in the shape of the letter V. After every step in the knee exercises, this position should be immediately taken. Thus, on count *one* the weight is carried to the front on the right leg, which is slightly bent at the knee; on count *two* the right foot is brought back to the side of the left foot in the military position, being the action of Figure 121. The same thing is done in Figure 122, except that the step is to the right lateral on count *one*, and to the military position on count *two*. By strictly observing this rule, it will be possible to make the many changes that add so much to the beauty of the knee exercises. See Figure 123.

Figure 20.

KNEE EXERCISE.

SECOND SET.

One two three four

The musical score is written for piano in 3/4 time, featuring a treble and bass staff. The key signature has one flat (B-flat). The first system includes a vocal line with lyrics 'One two three four' and piano accompaniment. The subsequent systems show various musical exercises, including arpeggiated chords, sustained notes, and complex rhythmic patterns. The score concludes with a double bar line and repeat signs.



FIG. 123. KNEE EXERCISE.

FIGURE 21 ENLARGED.—*Explanation:* This is the same as the exercises which are presented in Figures 121 and 122, except that the action is backward. It is not material what foot begins the movement, whether the right or the left. Some teachers begin all exercises with the left in preference to the right, and others reverse this. The class should be taught to work in harmony in this respect, either using the right to begin with at all times, or the left at all times. Figure 123 is a very hard and wearying exercise, and is accordingly very beneficial. To make it easy the foot should take a step backward of a few inches only, and the body should not be lowered much. To make it hard, let the foot take a large stride back and the knee be considerably bent. In all the knee exercises the first eight counts should be applied to the right foot, the second eight counts to the left, the third eight counts to the right, and the fourth eight counts to the left. This will complete one figure. Then the same counts will apply likewise to the next figure; and so on.

Figure 21.

KNEE EXERCISE.

THIRD SET.

One

two

three

four

five

six

seven

eight

The musical score is written for a piano in 3/4 time, featuring a treble and bass staff. The key signature is one sharp (F#). The score is divided into two main sections: 'KNEE EXERCISE' and 'THIRD SET'. The 'KNEE EXERCISE' section consists of eight measures, numbered 1 through 8. The 'THIRD SET' section consists of four measures. The notation includes various musical symbols such as notes, rests, and fingerings. The first measure of the 'KNEE EXERCISE' section is marked 'One' and features a treble staff with a quarter note (F#4), a half note (A4), and a quarter rest, and a bass staff with a quarter note (F#2), a half note (A2), and a quarter rest. The second measure is marked 'two' and features a treble staff with a quarter note (G#4), a half note (B4), and a quarter rest, and a bass staff with a quarter note (G#2), a half note (B2), and a quarter rest. The third measure is marked 'three' and features a treble staff with a quarter note (A5), a half note (C5), and a quarter rest, and a bass staff with a quarter note (A2), a half note (C2), and a quarter rest. The fourth measure is marked 'four' and features a treble staff with a quarter note (B5), a half note (D5), and a quarter rest, and a bass staff with a quarter note (B2), a half note (D2), and a quarter rest. The fifth measure is marked 'five' and features a treble staff with a quarter note (C6), a half note (E5), and a quarter rest, and a bass staff with a quarter note (C2), a half note (E2), and a quarter rest. The sixth measure is marked 'six' and features a treble staff with a quarter note (D6), a half note (F#5), and a quarter rest, and a bass staff with a quarter note (D2), a half note (F#2), and a quarter rest. The seventh measure is marked 'seven' and features a treble staff with a quarter note (E6), a half note (G#5), and a quarter rest, and a bass staff with a quarter note (E2), a half note (G#2), and a quarter rest. The eighth measure is marked 'eight' and features a treble staff with a quarter note (F#6), a half note (A5), and a quarter rest, and a bass staff with a quarter note (F#2), a half note (A2), and a quarter rest. The 'THIRD SET' section consists of four measures, each featuring a treble staff with a quarter note (F#4), a half note (A4), and a quarter rest, and a bass staff with a quarter note (F#2), a half note (A2), and a quarter rest.



FIG. 124. KNEE EXERCISE.

FIGURE 22 ENLARGED.—*Explanation:* Commence with either foot. If you use the right first, carry it around behind the left, so that the chest is turned from a front to a side face. On count *one* this act of moving the foot and lowering the body will occur; on count *two* the military position will be resumed; and so on for eight counts. Then, on the next eight counts, the left foot will be placed behind and to the right of the right foot. The action is a very pretty one. In public exhibitions the four movements of Figures 121, 122, 123 and 124 should be performed together, using the music of Figure 121, as there is not time to change. The first eight counts will carry the body forward and back four times each on the right foot, arms extended front; the next eight will carry the body forward and back on the left foot, arms extended front; the next eight to the right lateral, arms lateral; the next eight to the left lateral, arms lateral; the next eight behind on the right foot, arms high up; same on left foot; and the last two eights as in Figure 124, arms down and back.

Figure 22.

KNEE EXERCISE.

FOURTH SET.

One two one two

Dolce.

cres

cen do. f



FIG. 125. KNEE EXERCISE.

FIGURE 23 ENLARGED.—*Explanation:* This movement is easy enough to understand, but is too difficult to perform except in very brief periods. Instead of giving thirty-two counts to it, the wiser plan is to give about four until the muscles are very strong, in which case it will quickly add to their power. Otherwise the time and effort will be fruitless. One teacher began a series of lessons with this exercise; as a result the pupils became so lame that they could not walk without pain for the next two weeks. Yet all classes are able to perform the action after the preceding exercises of the series have been well practiced. We advise a slight lowering of the body to begin with, even when it is reached in the due order of instruction; then let the body down lower and lower each time, until the knee can brush the floor without touching. It should change on every eight counts from the right to the left knee. A gymnasium professor, who thought that tests of strength and endurance could not be made without apparatus, acknowledged that this surprised him. It was a new idea.

Figure 23.

KNEE EXERCISE.

FIFTH SET.

One two one two one two

p

one two



FIG. 126. KNEE EXERCISE.

FIGURE 24 ENLARGED.—*Explanation:* This is the only knee exercise where both knees work together, both being bent at the same time and in the same way. Very few persons, even professional athletes, are able to descend to the floor from a standing position by a smooth, uninterrupted descent. Hence we divide the action into two parts each way, and provide music that exactly suits it. The hands should rest on the hips as in Figure 126. On count *one* lower the body until you sit upon the heels, which will be raised. On count *two* let the weight of the body come down to the floor on both knees. On count *three* throw the weight back to the position in which you sit on the heels. This can be done by a quick impulse. On count *four* arise to a full standing position. Repeat the whole action again and rest. Very few persons are able to do this exercise unless they have strengthened the knees by taking all the preceding movements.

Figure 24.

KNEE EXERCISE.

SIXTH SET.

One two three four five six

p

The musical score is written for piano in G major (one sharp) and common time. It consists of six systems, each with a treble and bass staff. The first system includes dynamic markings (*p*) and articulation (accents) above the first five notes of the treble staff, which are labeled 'One' through 'five'. The sixth note is labeled 'six'. The score features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. The bass staff provides a harmonic accompaniment with chords and single notes. The piece concludes with a double bar line at the end of the sixth system.



FIG. 127. HIP EXERCISE.

FIGURE 25 ENLARGED.—*Explanation:* We come now to the first of the hip series. There are two places at which the body may be bent; one is at the hips, the other at the waist. If one is in ill health, or if the muscles are lacking in vigor through lack of use, there is a great tendency to bend always at the hip and never at the waist. Some persons cannot bend at all at the latter place, yet health requires action and pliability there. It is quite easy to perform the movement of Figure 127, but we shall use it as a forerunner of the development of power at the waist. In the present form the torso, which is the trunk of the body, should be lowered more and more with each trial, without bending the knees. By and by the waist muscles will acquire flexibility, even though they are not being bent. Lower the upper body on count *two*; raise it on count *three*; and so continue for thirty-two counts. Count *one* is preparation only.

Figure 25.

HIP EXERCISE.

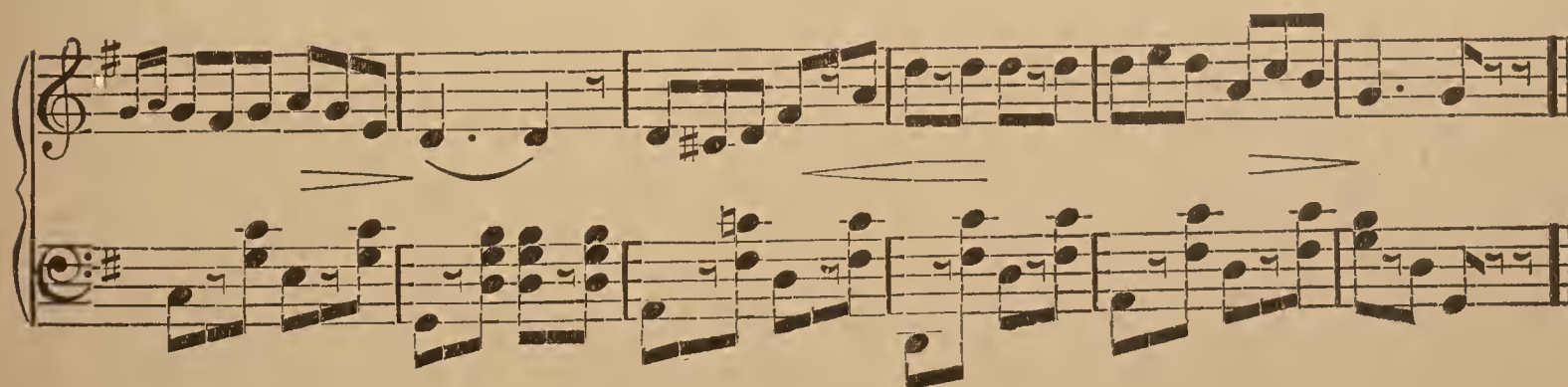
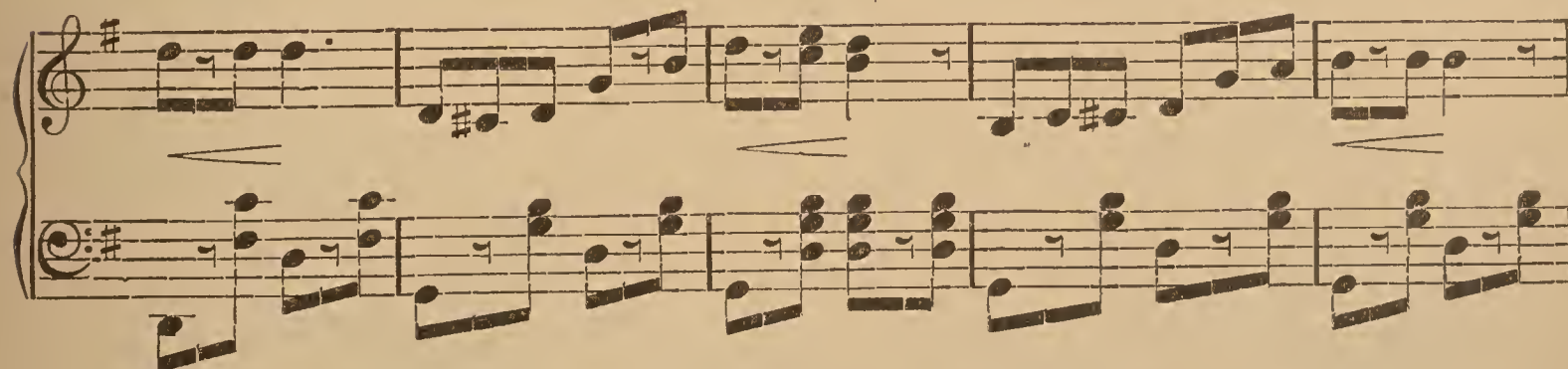
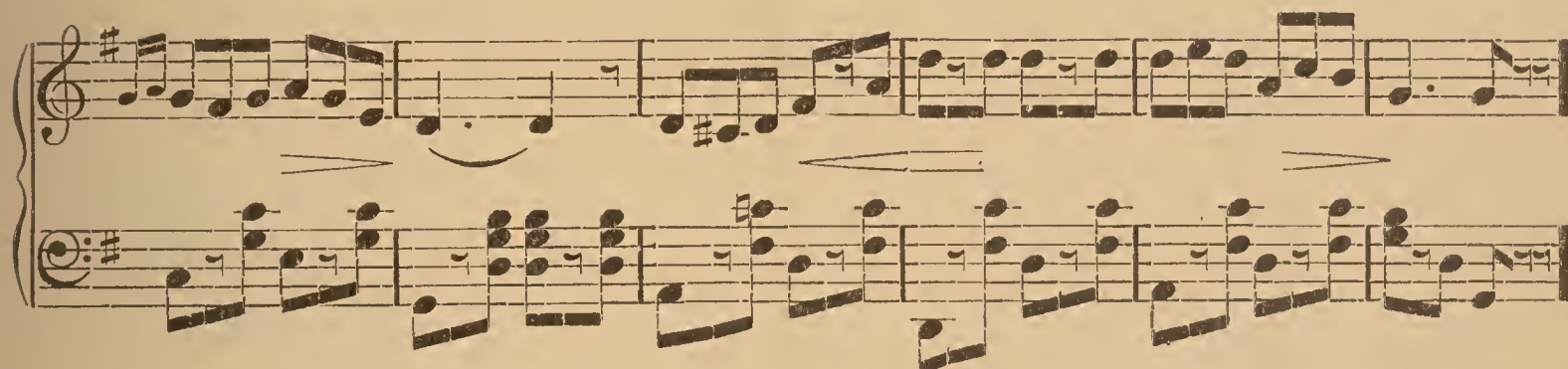
FIRST SET.

One

two

one

two



Details of Fig. 25.



Fig. 128.



Fig. 129



Fig. 130.



Fig. 131.



Fig. 132

In Ralston Term at Ralston University the exercises are sometimes varied to admit of more pleasure in the practice. If you will look at Figure 127 you will see the plain hip movement, while in Figure 128 the same action of the hip muscles is given more encouragement by the aid of a wand. Place the wand as high over the head as possible as a position of preparation on count *one*. On count *two* of the music on the preceding page, throw the wand to the front of the hips, hard against the body; on count *three* raise it again to the position high over the head; on *four* lower the wand to the hips; and so on for sixteen counts.

It will be noticed that Figure 128 is the position of preparation, and that Figure 129 shows the place where the wand is to be held, while Figure 130 corresponds with Figure 127. After the sixteen counts it is supposed that the pupil may be able to add a further variation by carrying the body lower than is indicated in Figure 130. On count *two* bring the wand to the hips, held hard against the body, and bend as in Figure 131. On count *three* raise the wand high over the head, which is the same as in the preparation on count *one*; on *four* lower the wand to the hip and bend over it. Continue in this way for thirty-two counts.

It is well to adhere to the practice as in Figure 127 for a week or two; then begin to use the wand, and in the latter case to abide by the lighter bending action of Figures 128, 129 and 130. This will save overdoing in the earlier stages of the course. It is always bad policy to get too weary at first. There is a difference between tiring the muscles and a general exhaustion of the vitality of the whole body. After the second week it may be well to bend as low as in Figure 131, and after the third week, as low as in Figure 132, always holding the wand hard against the body on the even-numbered counts. Later on, when the muscles are more flexible and the general tone of the vitality has improved, as it surely will to a remarkable degree, then may be a good time to even exceed the dip of the head, and some experts are able to hold a wand at the hips and bend so as to bring the head almost to the floor. This is, no doubt, an extraordinary range of action. But the movement described in Figure 132 is ample for all the purposes of health. It is a fact that this part of physical culture is of the highest value in the recovery of health. The vitality of the organs is so much benefited by persistent practice in this direction that it should be made a part of one's daily life.

Details of Fig 25 Continued



Fig. 133.



Fig. 134.



Fig. 135.



Fig. 136.

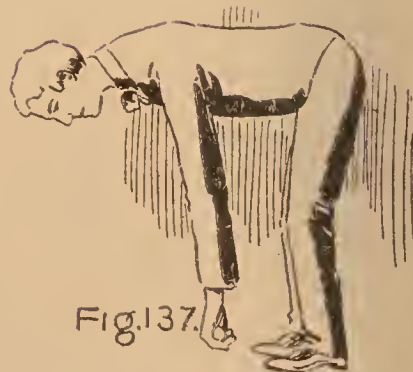


Fig. 137.

Ralston Physical Culture

We come now to a different line of variations of Figure 25, or the enlarged form as seen in Figure 127. The wand is used as in the group running from Figures 128 to 132. On count *one* place it high over the head as a position of preparation. This cannot be done when the hands are akimbo, as in Figure 127; there the body must wait for count *two*. But in the use of the wand the pupil may stand with that in the hands held down in front, then raise it on count *one* and lower it on count *two*. We have said that the object of variations as taught in Ralston University, of Washington, D. C., is to afford more pleasure; but greater benefits are derived from all the variations, not merely because they are conducive to the creation of sunshine, but largely on account of the extra value of the movements.

When the wand is brought downward on count *two*, the position is not against the body as in Figure 130, but some inches in front of the body, which is to be repeated on counts *four*, *six*, *eight*, and so on to the end. This prepares the way for other movements. In Figure 135 the even-numbered counts require a lowering of the wand to the knees, or about that locality, but some inches in front. It is quite different from the action with the wand held against the body at the hips. In Figure 136, the bending is lower yet, and requires the wand to be placed on a height with the upper ankle. This occurs on every even-numbered count.

In the final variation of the hip movement, as seen in Figure 137, the wand should be brought to the height of the toes. This may be accompanied by a very slight bending of the knees. In some systems it is required to touch the floor with the tips of the fingers without bending the knees; but to keep the legs straight while so bending is apt to strain the cords and do an injury to them. The exercise is a good one after sufficient preliminary practice has been indulged in, and the muscles are flexible and at the same time strong. The impulse of the wand, together with arms and torso, all descending together, quickly carries the pupil to the danger point of straining if the legs are kept straight, for which reason we recommend the bending at the knees as seen in Figure 137. Approach even this gradually. Over-enthusiasm often tends to the injury of some muscle or cord, as the body is merely a machine that is as capable of being damaged by violence as any other. Avoid roughness of action and the straining that comes from excessive exertion.



FIG. 138. HIP EXERCISE.

FIGURE 26 ENLARGED.—*Explanation:* Commence with the feet in the military attitude; heels together and toes out; the face to the front. Place the hands on the hips. On count *one* swing the middle of the body out to the right in a lateral direction a few inches only. On count *two* reverse this by throwing the middle of the body a few inches to the left. The face should be turned in an opposite direction each time; thus, when the middle of the body is thrown to the right the face in the same act and count should be turned to the left and *vice versa*. Little by little, as the practice proceeds, the hip should be given a greater advance laterally, but not suddenly. Care should be taken not to jar or jerk the body, as lack of smoothness destroys all the good effects of exercise. One matter must be strictly observed; the head should remain over the feet in a vertical line, and not sway either way. It particularly should not incline with the action of the hip. It may be turned and yet not made to lean.

Figure 26.

HIP EXERCISE.

SECOND SET.

The musical score for 'The Rose Tree' is presented on two staves. The top staff is in treble clef and the bottom staff is in bass clef. Both staves are in 6/8 time and have a key signature of one flat (B-flat). The melody in the treble staff is marked with 'One' and 'two' above the first two measures, and 'one' above the third measure. The bass staff begins with a piano (*p*) dynamic marking. The score consists of 12 measures in total, with a repeat sign at the end of the first six measures.

The image shows a musical score for the piece "Two" by George Gershwin. The score is written for piano (p) and violin (v). The piano part is on the left, featuring a treble and bass staff with a grand staff bracket. The violin part is on the right, on a single staff. The key signature is one flat (B-flat), and the time signature is 4/4. The score includes various musical notations such as notes, rests, and dynamic markings. The word "two" is written above the piano staff at the beginning. The score is presented in a clean, black-and-white format.

A musical score for a piano piece. The title 'The Rose Tree' is written in a decorative, stylized font at the top. Below the title, there are two staves of music. The top staff is in treble clef and the bottom staff is in bass clef. Both staves have a key signature of one flat (B-flat) and a 2/4 time signature. The music consists of a series of chords and single notes, with some measures containing multiple notes beamed together. The score is presented on a light-colored background with a dark border.

A musical score for a piano piece. The top staff is in treble clef with a key signature of one flat (B-flat). The bottom staff is in bass clef with a key signature of one flat (B-flat). The music consists of several measures with various note values, including eighth and sixteenth notes, and rests. There are some decorative flourishes and a large, stylized 'S' shape in the bottom left corner of the page.



FIG. 139. HIP EXERCISE.

FIGURE 27 ENLARGED.—*Explanation:* The action of the hip in this system of exercises is exactly opposite that of the waist, as will be seen by reference to later movements devoted to the waist. Yet the hip is so close to that portion of the body that it seems as if it were not possible to have two entirely different series of movements applicable to these adjacent parts. In a true hip exercise, not to the front, the head remains over the feet; in a true waist exercise of front or of lateral action the head passes out of its fixed position and accompanies the inclinations of the torso. In the above movement the hip passes to one side on *one* count, then to the front, then to the other side, then to the back, making the full circuit. It is well to reverse at the end of every series of four counts. Thus, if you start to the left on count *one*, then to the front, right and back, you should start to the right on count *five*, and to the front, left and back.

Figure 27.

HIP EXERCISE.

THIRD SET.

One two three four one two three four

The musical score is written for piano and consists of six systems. Each system has a treble staff and a bass staff. The key signature is one sharp (F#) and the time signature is common time (C). The first system includes a vocal line with lyrics 'One two three four one two three four' and a melodic line with eighth and sixteenth notes. The subsequent systems show the piano accompaniment with various chords and melodic fragments. The score ends with a double bar line.



FIG. 140. HIP EXERCISE.

FIGURE 28 ENLARGED.—*Explanation:* Here is a movement of the highest value that has gone to waste by the inability of pupils to catch its meaning unless shown by some teacher who is familiar with it. Many instructors have failed to understand it. The pupil is allowed to merely throw the foot across the body regardless of the more important part of the exercise. If it were intended for a light step it would have been so classed. The first essential is to sway the hip to the right as far as possible; the second essential is to swing the left foot across the other and to the right as far as possible; and both movements must be made together as count *one*. Then immediately throw the left hip as far to the left as possible, and swing the right foot across the left leg in that direction, both as count *two*. These are the characteristics of the exercise. Some make the mistake of not giving the foot a full lateral swing.

Figure 28.

HIP EXERCISE.

FOURTH SET.

One two three four five six seven eight

mf

ff



FIG. 141. HIP EXERCISE.

FIGURE 29 ENLARGED.—*Explanation:* This is a difficult movement to execute properly. It looks in the picture as though it might be easily done, and the first few counts seem to indicate the same thing; but it becomes the greatest test of power and endurance of all the exercises thus far given in the present series. In the first place the weight must be sustained on one foot, while the body makes a complex movement of its parts. The hip is thrown to the right on count *one*; and while this is being done, the left leg, the shoulders and the head are all thrown to the left lateral. The leg should be lifted as high as possible and to the side, not obliquely forward. On count *two* the hip is thrown to the left and the free leg, shoulders and head to the right. The body should depart as far as possible out of a straight line. The fact that the inside cords at the upper part of the legs are wearied is important. There is no exercise but this that reaches the muscles there.

Figure 29.

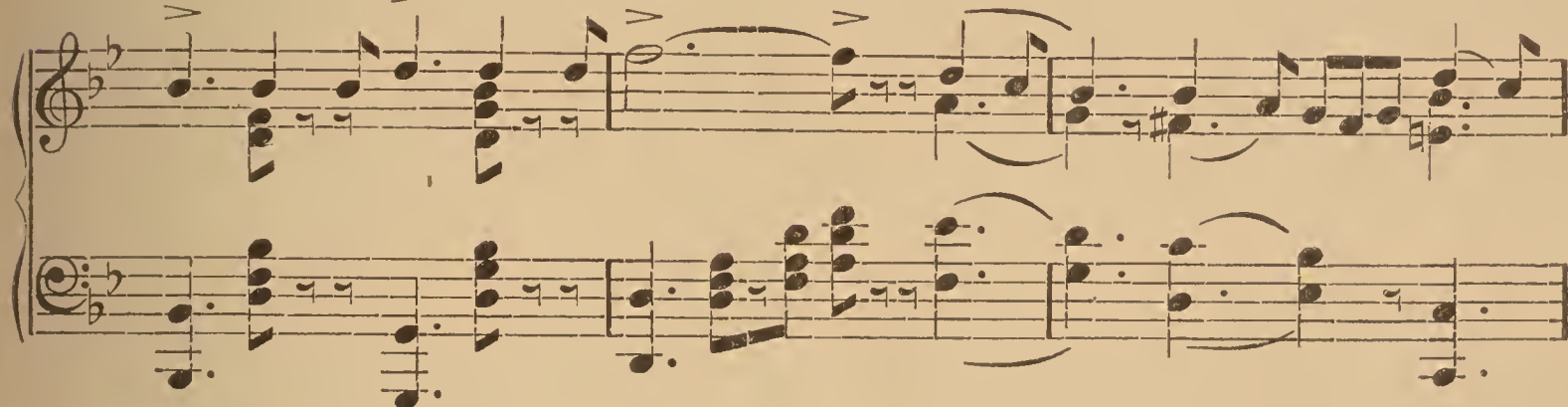
HIP EXERCISE.

FIFTH SET.

One two one two



one two one two



one two one two



one two one two



one two one two





FIG. 142. HIP EXERCISE.

FIGURE 30 ENLARGED.—*Explanation:* This is a peculiar exercise and one that serves to reach muscles that cannot be trained in any other action. It is not a single muscle that is affected, but a combination. Owing to the number of muscles in the body, the combinations are many. Relief comes best when it changes the use of a muscle; for activity with variation is often better than activity with absolute repose of the muscles. Raise the right knee on count *one*, lower it on count *two*, raise it on count *three*, and so continue for eight counts. On the ninth raise the left knee; lower the left on the tenth; and so on to the end of the second eight. After a brief rest, perform the movements alternately, raising the right knee on count *one*, lowering it on count *two*; raising the left knee on count *three*, lowering it on count *four*; and so continuing for sixteen counts. The hip muscles are strengthened and benefited, provided all the preceding exercises in the series have been well performed.

Figure 30.

HIP EXERCISE.

SIX SET.

One two one two

The musical score is written for piano in 3/4 time. It consists of six systems, each with a treble and bass staff. The first system includes the tempo markings 'One two one two' above the first four measures. The notation features a variety of chords, including triads and dyads, with some measures containing slurs or repeat signs. The key signature has one sharp (F#). The piece concludes with a double bar line and repeat signs in the final measure of the sixth system.



FIG. 143. WAIST EXERCISE.

FIGURE 31 ENLARGED.—*Explanation:* Here we commence the series of movements that are designed to strengthen the muscles of the waist. They are very old, probably four thousand years of age, the first two. The bending at the waist is the most beneficial of exercises, as far as immediate results are concerned in the matter of health. Nothing better can be practiced in cases of stomach weakness, indigestion and inactivity of the system. The above exercise requires the bending to the right on count *one*, and the head and shoulders should be inclined to the right as far as possible. On count *two* the action is to the left. The more the head is lowered the more the waist muscles will be called into effort. This little fall of the head makes a great difference in the tax which is placed upon the lower chest and waist, and this is of decided value. Be sure not to bend at the hip joints.

Figure 31.

WAIST EXERCISE.

FIRST SET.

One two one two one two

one two 3 3

fz

3 3 3 3



FIG. 144. WAIST EXERCISE.

FIGURE 32 ENLARGED.—*Explanation:* 'This is the second of the ancient exercises, that of Figure 31 being the first. A variation consists merely in the use of the forward and backward action. But we propose to combine them, and save unnecessary waste of time. The exercise is divided into four parts: The first is the bending to the side; the second, to the front; the third, to the back; the fourth, to the other side. The hardest as well as the least valuable of the details is the forward bending. Few persons actually use the waist line as the place of hinging; they think they do so when in fact they use the hip joints as the line. Experience shows that it is not possible for very stout persons to indent the abdomen; the hip will invariably take the action. The next exercise is designed to overcome the difficulty. In the present movement it is necessary to reverse at every four counts.

Figure 32.

WAIST EXERCISE.

SECOND SET.

One two three four

The musical score is written for a piano and consists of seven systems, each with a treble and bass staff. The key signature has two flats (B-flat major), and the time signature is 3/4. The first system includes dynamic markings 'p' (piano) and 'f' (forte). The music is composed of various chords, single notes, and rests, with some measures containing multiple notes beamed together. The piece concludes with a double bar line at the end of the seventh system.



FIG. 145. WAIST EXERCISE.

FIGURE 33 ENLARGED.—*Explanation:* This movement has been introduced into the Ralston System during the past year, owing to the difficulty met with by stout persons in trying to bend forward at the waist. The use of the hip joints is very clumsy and ungraceful, especially in the act of bowing. Flexibility at the waist line, and the ability to bend there, are necessary to good health. A few minutes' practice daily will produce a vast amount of good, and the best exercises for health are those that affect the waist and chest muscles. In this movement care must be had to avoid a lateral as well as a forward or backward action. Half way between the two, or an oblique direction, is necessary. These obliques run as opposites. For instance, on count *one* bend to the right oblique back; on *two* bend to the left oblique front; and so continue for eight counts. On *nine* bend to the left oblique back; on *ten* to the right oblique front; and so on. Keep the hands at the waist line to see that the hinging occurs there.

Figure 33.

WAIST EXERCISE.

THIRD SET.

One two three

p

four five six

f

Details of Fig. 33.



Fig 146.



FIG. 147.



Fig. 148.



Fig. 149.



Fig. 150



Fig. 151.

Ralston Physical Culture.

The object of the variations associated with Figure 33, which is presented in enlarged form in Figure 145, is not to depart from the main action of that exercise, but to explain it, and enlarge upon it. By referring to the series of waist exercises beginning with Figure 31 and ending with Figure 36, it will be seen that the first is a lateral movement, and the second a rotary action, in which the latter assumes two of the positions of the former without reproducing any of its real motion or affecting the muscles in the same way. Figure 34 is a delightful, but distinct, change from both; and the same may be said of Figures 35 and 36.

In Figure 33 the object is to tax the oblique uses of the muscles, an entirely new idea in physical training, and of the highest value in this line of education. These oblique movements may be varied to a much greater extent than is at first supposed. If the motion be made to throw out the middle of the body, it is largely a hip action, yet causes a decided waist tax when done obliquely. On the other hand, if the upper part of the body is made to take the full movement, the waist alone is subjected to the exercise. Start with the erect standing position; on count *one*, incline the upper body obliquely forward; on count *two*, come to an erect position; on *three*, incline obliquely forward; and so continue for eight counts. Then, on count *nine*, incline the body obliquely forward, but in the other direction; and continue to complete eight more counts. On *seventeen*, incline obliquely backward for eight more; and finally incline obliquely backward in another direction.

The most important of the oblique variations is seen in Figures 150 and 151. Commence by an erect standing position; on count *one* place the hands back of the neck and incline the body right oblique backward, bending only at the waist; on count *two* release the hands and carry them by a sudden movement down to the left foot. This compels the body to cut a cross-oblique line from right back to left front. After eight counts of this, carry the hands to the neck while the body leans left oblique backward on count *nine*; then bring them to the right foot by a diagonal movement to the right oblique front. This is a hard and vigorous variation, and requires that due attention be given to the exercises that properly precede it.

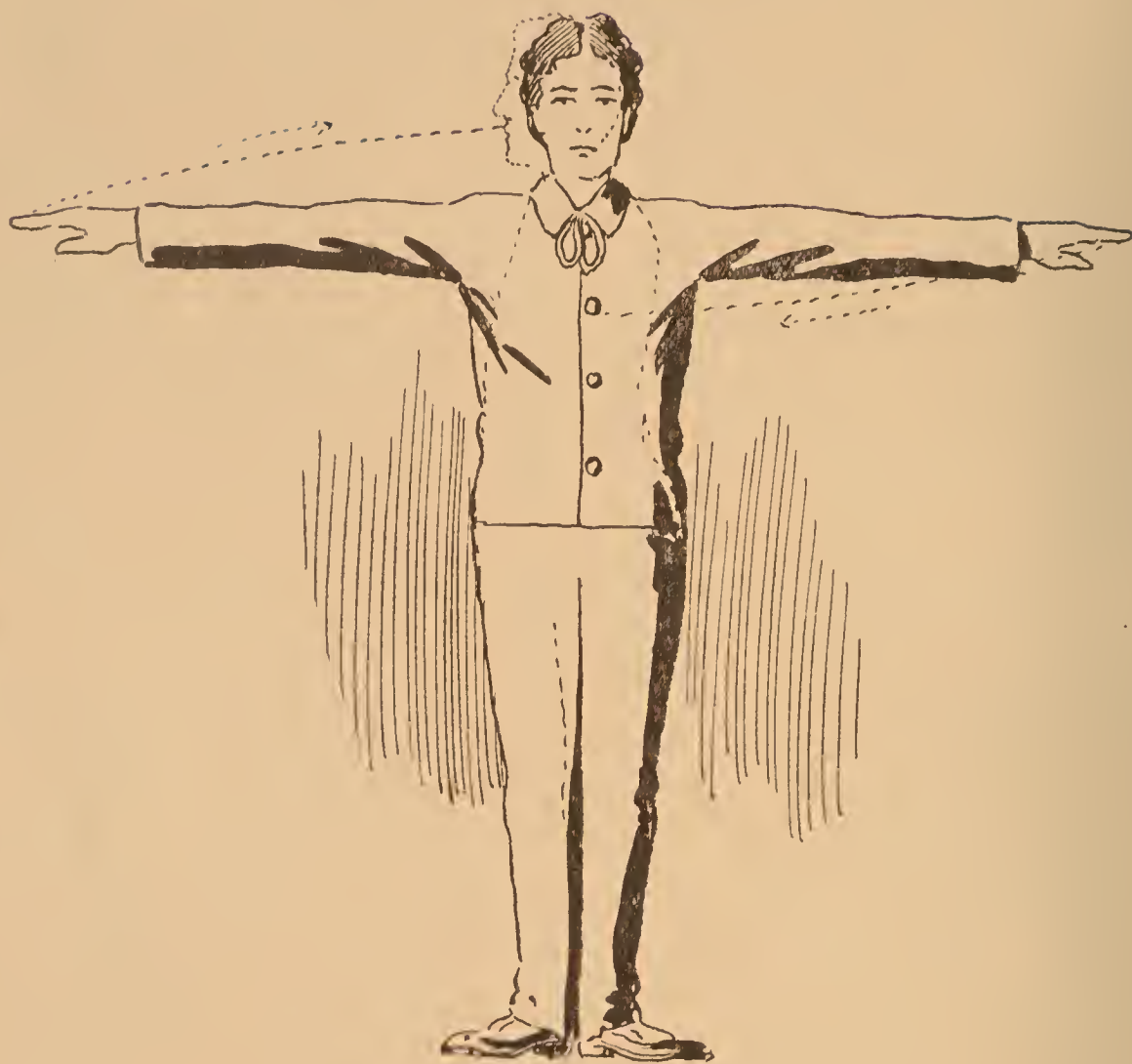


FIG. 152. WAIST EXERCISE.

FIGURE 34 ENLARGED.—*Explanation:* This is a very interesting as well as beneficial action, provided all the requirements are strictly observed. The heels should be together, toes out; the calves of the legs should touch, and be held firmly against each other; there must be no twisting of the lower half of the body, for the tax would then be removed entirely from the waist and placed at the ankles without benefit to them. Imagine that the legs are pinioned together and held in a vice, so they cannot move. On count *one* swing the extended arms around to the right. On count *two* they should swing to the left. Keep the arms well back so as to make them as one long pole, and do not lower them from a position parallel with the floor. See that the waist gets all the tax. A pleasant way of performing the exercise is to commence with short movements to the right and left, and gradually increase their extent.

Figure 34.

WAIST EXERCISE.

FOURTH SET.

One two three four five six

The musical score is written for a piano, featuring two staves per system. The key signature is one sharp (F#), and the time signature is common time (C). The exercise is divided into six measures, each labeled with a number from one to six. The notation includes various rhythmic values such as eighth and sixteenth notes, as well as rests. The first system contains measures one through three, the second system contains measures four through six, and the subsequent systems continue the musical pattern. The exercise concludes with a final cadence in the sixth system.



FIG. 153. WAIST EXERCISE.

FIGURE 35 ENLARGED.—*Explanation:* This is a beautiful action when performed by a class in unison. Most teachers wish to present their classes to the public, and there are no better exercises than those which occur in the series of the knee, in this of the waist, and in others where the arms aid in giving picturesqueness to the work. The fault of an exercise of this kind is in the inability of the pupil to hinge the body's bending at the waist. Before commencing the practice it is well to place the hands hard against the sides, above the hip bones, and press in to see that the bending occurs there. The arms should form a walking-beam in their action, and must be kept perfectly straight even when they are made to tip. The exercise should commence easily and gradually increase until the bending may be sufficient in time to permit the arms to assume a vertical attitude.

Figure 35.

WAIST EXERCISE.

FIFTH SET.

One two one two

The musical score is written for piano in 2/4 time. It consists of 16 measures arranged in 8 systems, each with a treble and bass staff. The key signature has one sharp (F#). Above the first system, the words "One two one two" are written, with "V" marks above the first, third, and fifth measures. The music features various chords, single notes, and triplets. The piece ends with a double bar line in the final measure.



FIG. 154. WAIST EXERCISE.

FIGURE 36 ENLARGED.—*Explanation:* This is the most telling of all the movements in the waist series, and may well suit the powers of an athlete. Like every final exercise in a series, it is especially hard and valuable. If a person were to seek this line of training chiefly to acquire great strength, the finals could be classed together as the most powerful known to legitimate physical culture. By this we mean a system of exercises that cannot strain, yet are able to produce the greatest strength. In the above movement it requires flexibility at the waist to bring the forehead to the knee. This is count *one*. On *two* the torso is bent backward and the arms extended behind the body, the farther back the torso is thrown the more severe will be the tax on the muscles of the waist. This is the only exercise ever introduced that compels the waist muscles to yield in the forward action; the hips cannot interfere.

Figure 36.

WAIST EXERCISE.

SIXTH SET.

One

two

one

two

one

two

A handwritten musical score for the song 'The Rose Tree'. The score is written on two staves. The top staff uses a treble clef and a key signature of one flat (B-flat). It begins with a treble clef, a key signature of one flat, and a common time signature 'C'. The melody is written in a simple, folk-like style with eighth and quarter notes. The bottom staff uses a bass clef and a key signature of one flat. It begins with a bass clef, a key signature of one flat, and a common time signature 'C'. The accompaniment is written in a simple, folk-like style with quarter and eighth notes. The paper is aged and yellowed, with some staining and wear visible. The handwriting is in dark ink, and the overall style is that of a 19th-century manuscript.

A musical score for the song 'The Rose Tree'. It features two staves: a treble staff with a key signature of one flat (B-flat) and a common time signature (C), and a bass staff with a key signature of one flat (B-flat) and a common time signature (C). The melody is written in the treble staff, starting with a treble clef and a B-flat key signature. The bass staff provides a harmonic accompaniment, starting with a bass clef and a B-flat key signature. The music is written in a simple, folk-like style with eighth and sixteenth notes. The score is divided into two systems by a vertical line. The first system contains four measures, and the second system contains four measures. The music ends with a double bar line.

A handwritten musical score for the song 'The Rose Tree'. The score is written on two staves. The top staff uses a treble clef and a key signature of one flat (B-flat). The bottom staff uses a bass clef and the same key signature. The melody is written on the top staff, and the accompaniment is written on the bottom staff. The music is in common time (C). The score is divided into two systems by a vertical line. The first system contains the first two measures of the melody and the first two measures of the accompaniment. The second system contains the next two measures of the melody and the next two measures of the accompaniment. The melody consists of eighth and sixteenth notes, with some measures containing beamed notes. The accompaniment consists of chords and single notes. The score is written in ink on aged, slightly yellowed paper.



FIG. 155. CHEST EXERCISE.

FIGURE 37 ENLARGED.—*Explanation:* This is the first of the chest movements, and it can be made as effectual as the ambition of the pupil demands. In ill health the lower chest is inactive, and the same is true in cases of sedentary disposition. The lungs are used only in their upper region, although they extend downward along the sides for quite a distance, where they become diseased from disuse. In the above action the hands should be pressed very firmly against the ribs, while an ingoing breath is used to force them out. Let the pressure of the hands compel the breath to do greater work in forcing out the sides. This will soon open and vitalize the best part of the lungs. On count *two* let the hands force the breath out by a very hard effort, and, on each repetition, the hands should press in still more. The object is to make the chest frame very flexible and to increase the range of respiration.

Figure 37.

CHEST EXERCISE.

FIRST SET.

One two one two one

two

mf

The musical score is written for piano in 3/4 time. It consists of six systems, each with a treble and bass staff. The first system includes a dynamic marking of *mf* and breath marks 'V' above the first staff. The exercise is divided into measures by vertical bar lines, with some measures containing multiple notes. The notation includes treble and bass clefs, key signatures, and various musical symbols like slurs and accents.

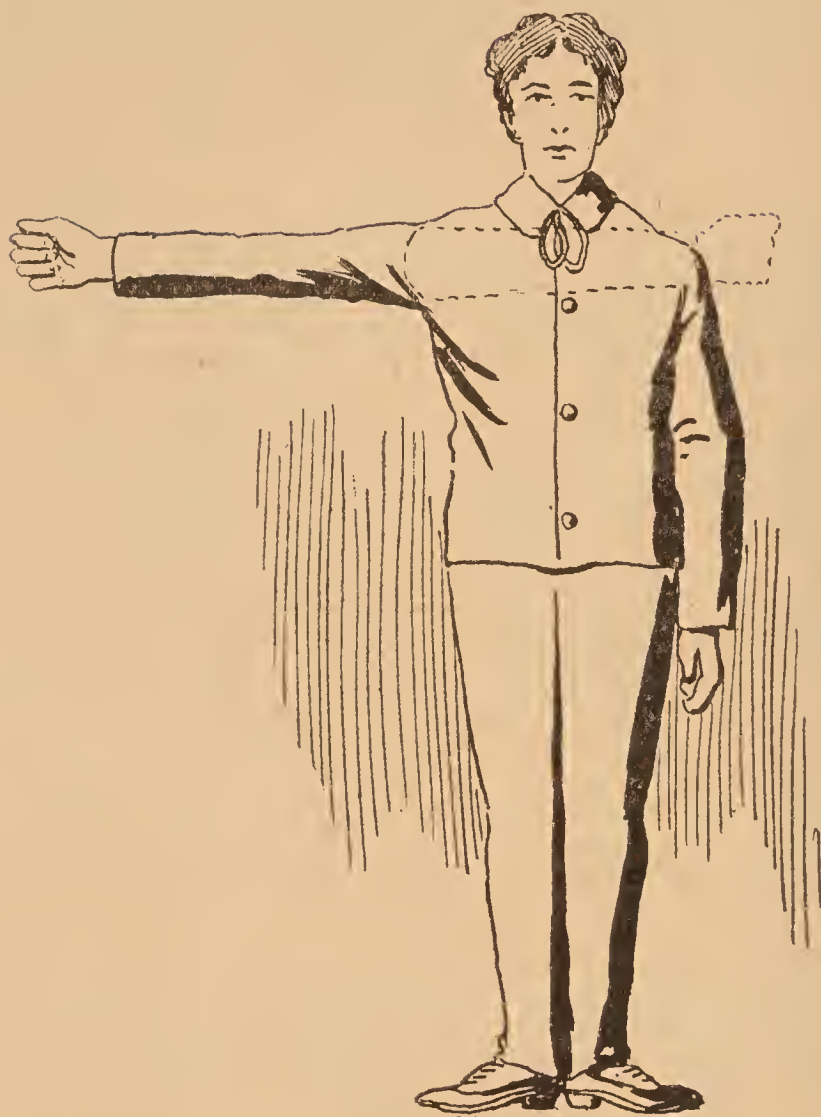


FIG. 156. CHEST EXERCISE.

FIGURE 38 ENLARGED.—*Explanation:* This movement may be performed to almost any air. On count *one* the unbent arm should strike the chest frame, and on count *two* the arm should move outward to a lateral line on a height with the shoulder. If the accent of the music is such as to render the reverse action more effective, then let the arm be raised in front of the chest for preparation only and brought out to its lateral position on count *one*, and against the chest on count *two*. The whole value of the exercise is in the stiff arm and a resisting chest. It is better to fill the lungs with a good, vigorous inhalation and hold the breath for eight counts, unless this makes you dizzy. It is quite easy for a strong-chested person to maintain a fully extended chest frame even if empty of air, and this is as good as a held breath, as far as strengthening the lungs and chest is concerned.

Figure 38.

CHEST EXERCISE.

SECOND SET.

One two one two

ff



FIG. 157. CHEST EXERCISE.

FIGURE 39 ENLARGED.—*Explanation:* This is a particularly important movement, and is designed to strengthen the upper side muscles of the chest. We call it the wing exercise in class. There are many interesting variations which may be considered. On count *one* raise the right elbow; on count *two* lower it and continue for eight; on count *nine* raise the left elbow; on *ten* lower it; and continue for eight; on count *seventeen* raise the right elbow; on *eighteen* raise the left and lower the right; on *nineteen* raise the right and lower the left and continue for eight; on *twenty-five* raise both, then lower them on the next count, and so finish. Occasionally perform the full exercise with the lungs filled with air and the breath held, always stopping as soon as you become dizzy.

Figure 39.

CHEST EXERCISE.

THIRD SET.

Animato.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 2/4. It contains a melodic line with eighth and sixteenth notes, including accents and a dynamic marking of *p* (piano). The lower staff is in bass clef with the same key signature and time signature, providing a harmonic accompaniment with chords and moving lines.

The second system continues the musical exercise with two staves. The upper staff maintains the melodic pattern with various rhythmic values and accents. The lower staff continues the harmonic support with chords and moving lines.

The third system of musical notation consists of two staves. The upper staff features a melodic line with a dynamic marking of *p* (piano) and accents. The lower staff provides a harmonic accompaniment with chords and moving lines.

The fourth system of musical notation consists of two staves. The upper staff continues the melodic pattern with accents. The lower staff continues the harmonic support with chords and moving lines.

The fifth system of musical notation consists of two staves. The upper staff continues the melodic pattern with accents. The lower staff continues the harmonic support with chords and moving lines, concluding the exercise.

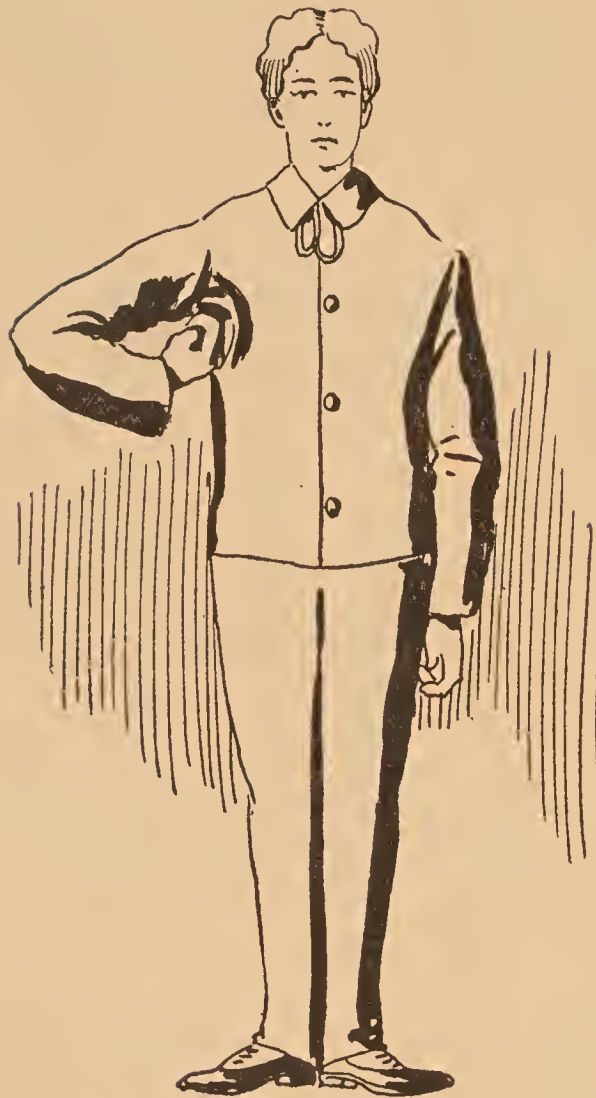


FIG. 158. CHEST EXERCISE.

FIGURE 40 ENLARGED.—*Explanation:* This excellent movement is known by our classes as the Perpendicular Drill, and is one of the most effective ever invented. Nothing like it was ever known until it was used by the Ralston System, for which it was specially prepared. It is as different from the calisthenic movement, which it seems to resemble, as day is from night. This action requires that the hand be clinched, energized and kept under the arm. On count *one* the fist is to be brought up so as to strike the under part of the arm at the arm-pit, not in front but under. This is very difficult. On count *two* throw the fist downward in a straight line; continue for eight. On *nine* raise the left fist under the left arm, striking hard; then lower it on *ten* and continue; on *seventeen* raise the right fist; on *eighteen* raise the left and lower the right; on *twenty-four* raise both, and continue to *thirty-two*.

Figure 40.

CHEST EXERCISE.

FOURTH SET.

One two one two

The musical score is written for a piano and consists of six systems, each with a treble and bass staff. The key signature is one sharp (F#) and the time signature is 6/8. The first system includes the words "One two one two" above the first four measures, with accents placed over the notes. The notation includes various musical symbols such as treble and bass clefs, key signatures, time signatures, notes, rests, and dynamic markings like accents and slurs.



FIG. 159. CHEST EXERCISE.

FIGURE 41 ENLARGED.—*Explanation:* Here is another of those immensely valuable exercises that are capable of overcoming disease in the most unexpected manner. The seat of life is in the chest. The present movement is the very best of all for increasing the vitality of the lungs, and that means the vigor of the whole body. The music should be specially adapted to the action, as it is of a double nature. On count *one* place the left hand on the chest, and strike the back of that hand with the palm of the right on count *two*. Tapping the chest was always a valuable means of increasing its vitality, but most pupils strike too hard. This enables one to accomplish the desired end, but the blow cannot be too hard when dealt first to the back of the hand. The under hand may be made to travel over the entire chest surface; then go back again, using the right as the under hand.

Figure 41.

CHEST EXERCISE. **FIFTH SET.**

One two three four five six

Play fast.

The musical score is written for piano accompaniment in a 6/8 time signature with a key signature of one flat (B-flat). It consists of six systems, each with a treble and bass staff. The first system includes fingerings and accents for notes 1 through 6. The instruction "Play fast." is written below the first system. The notation includes various chords, single notes, and slurs across the six systems.

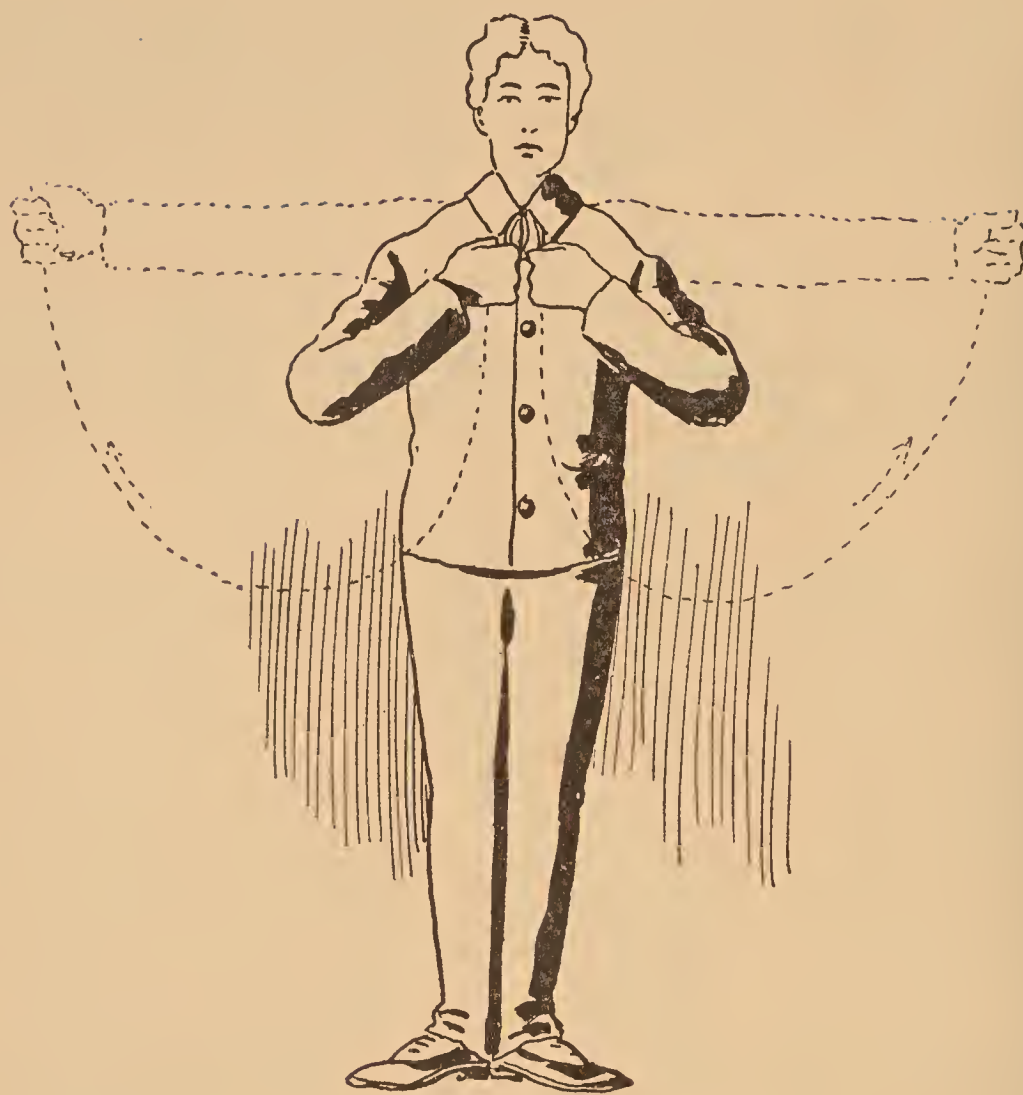


FIG. 160. CHEST EXERCISE.

FIGURE 42 ENLARGED.—*Explanation:* This is an interesting and beautiful exercise as well as one that is of decided value in seeking health or strength. To commence it, take the usual standing position and raise the clinched fists to the upper chest. On count *one* describe a semicircle with the fists by causing them to descend and depart outwardly from the body as they are raised to a new position on a level with the shoulders. All this constitutes count *one*. On count *two* allow the fists to again traverse the path of the semicircle and be brought up to their first position on the upper front chest. Count *three* will be the repetition of count *one*, and so continue until *thirty-two* is reached. It is a series of swinging movements. They strengthen the muscles of the chest and give vigor to the lungs.

Figure 42.

CHEST EXERCISE.

SIXTH SET.

One two one two

The musical score is written for piano and includes six systems of music. Each system consists of a treble staff and a bass staff. The first system includes vocal line notation with lyrics 'One two one two' and dynamic markings. The subsequent systems show the piano accompaniment for the exercise, featuring various chords and melodic lines. The key signature is one sharp (F#) and the time signature is common time (C).

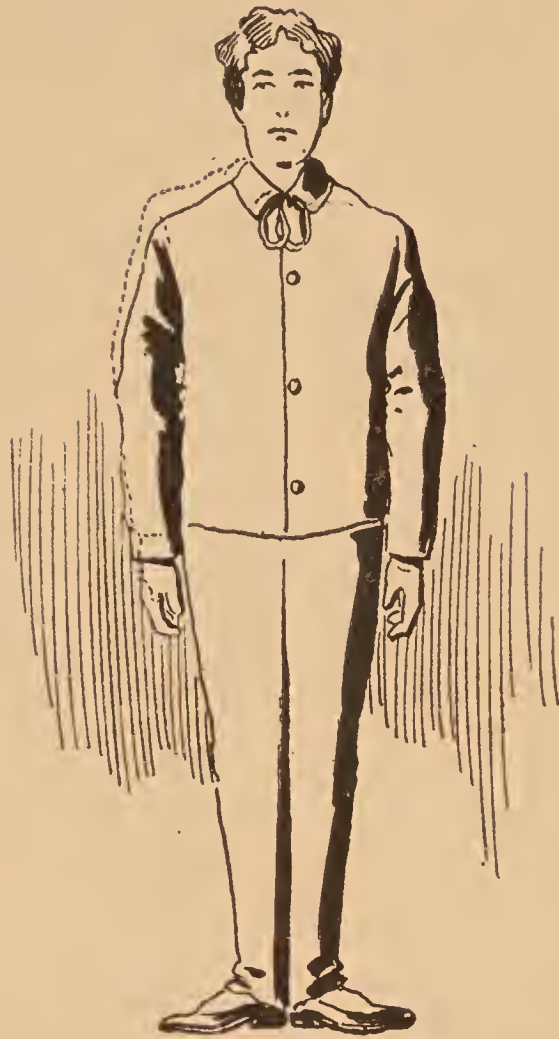


FIG. 161. SHOULDER EXERCISE.

FIGURE 43 ENLARGED.—*Explanation:* We now commence the shoulder series. It has a special importance in that each exercise draws new life to the upper regions of the chest; nutrition is brought to the hollows that are almost always found just inside the line of the shoulders near the chest, and flesh is added. All the shoulder exercises reach the diverging lines of muscles that spread over these hollows; and there is no other way of filling them up. They overcome not only the deep valleys but are quite sure to remedy the prevailing deformity of the times—flat chests. In Figure 145 the right shoulder is raised on count *one* and lowered on count *two*, continuing to *thirty-two*. Then the left shoulder is likewise employed, and both alternately, then together.

Figure 43.

SHOULDER EXERCISE.

FIRST SET.

One

two

one

two



FIG. 162. SHOULDER EXERCISE.

FIGURE 44 ENLARGED.—*Explanation:* While the exercise of Figure 145 is essential to the full development of the present movement, and should be thoroughly mastered in advance, this is by far the more important because of its value in drawing nutrition to the chest, filling the hollows, adding flesh and overcoming the defect known as flat chest. Stout persons often have hollows near the shoulders, which are indications of weak lungs. All women wish a perfect form at the neck and upper chest, as well as in the arms, and the present exercise, added to the others of this series, will produce these beneficial results. On count *one* raise the shoulder very high; on count *two* thrust it forward; on count *three* lower it heavily; on count *four* thrust it back; on count *five* raise it; on count *six* thrust it back; and so continue to *thirty-two*; then use the other shoulder likewise.

Figure 44.

SHOULDER EXERCISE.

SECOND SET.

One

two

three

four

five



FIG. 163. SHOULDER EXERCISE.

FIGURE 45 ENLARGED.—*Explanation:* Now comes a very hard movement. It must be remembered that each exercise in the Ralston System has some definite purpose; not merely the general end of producing the best of health; but a specific design with relation to the development of a certain set of muscles. The action of Figure 45 is the best known for reaching the muscles of the back behind and at the shoulders. To commence it let the arms hang at the sides at full length. On count *one* raise the arms in such a way as to produce right angles at the elbows, the hands being elevated; on count *two* lower the forearms only, still preserving the right-angled shape. This is done by turning the forearms over, using the muscles at the shoulders for the change. The severity of the exercise is surprising, but it soon makes a person thick-set and solid at the shoulders and upper back.

Figure 45.

SHOULDER EXERCISE.

THIRD SET.

One two three four

f

ff



FIG. 164. SHOULDER EXERCISE.

FIGURE 46 ENLARGED.—*Explanation:* The tasks grow harder as we proceed. The above exercise will eat up any surplus fat at the shoulders and upper parts of the torso; yet will add flesh where that is lacking. You know that fat is not flesh; it is not the result of nutrition but of stagnation, and should be thrown off when over-accumulated. On the other hand, flesh is the result of nutrition, and is really nutrition in itself. Thus the same exercise may reduce the weight of one person by eliminating the fat, and may increase the weight of another by adding flesh. In the above movement raise the hands over the head as high as possible, with the fists clinched. On count *one* bring them down in a wide, sweeping semi-circle, striking the sides of the hips; on count *two* return them to the high altitude, striking the fists together over the top of the head.

Figure 46.

SHOULDER EXERCISE.

FOURTH SET.

One two one two one two one two

The musical score is written for piano in C major, 2/4 time. It consists of six systems, each with a treble and bass staff. The first system includes rhythmic counts: 'One two one two one two one two'. The melody in the treble staff features eighth and sixteenth notes, often beamed together, with accents and slurs. The bass staff provides a harmonic accompaniment with chords and single notes. The piece concludes with a double bar line and repeat dots at the end of the sixth system.



FIG. 165. SHOULDER EXERCISE.

FIGURE 47 ENLARGED.—*Explanation:* This action is called plucking grapes. They are situated rather high, and can be reached only by a long stretch of the arm, body and feet. This complicated movement requires music that is specially adapted to the details of the action. On count *one* rise as high as possible on the tips of the toes and raise the right hand as though to take a bunch of grapes. The music will furnish an opportunity for making a special effort as though to leap. This requires a stretching of the arm; the shoulder muscles are taxed to the utmost without strain, and the contiguous muscles are likewise called into action over the front and back of the upper torso. Allow the main effort of reaching to be made with the arm so that it will involve the shoulder as much as possible. The left shoulder should be likewise employed, then both alternately.

Figure 47.

SHOULDER EXERCISE.

FIFTH SET.

The musical score is written for piano accompaniment in 6/8 time, key of B-flat major (two flats). It consists of six systems, each with a treble and bass staff joined by a brace. The first system begins with a mezzo-forte (*mf*) dynamic marking. The notation includes various musical symbols such as eighth notes, quarter notes, half notes, rests, and slurs. Some notes are beamed together in groups of six, corresponding to the 6/8 time signature. Fingering numbers (1, 2) are indicated above certain notes. The piece concludes with a double bar line and repeat dots at the end of the sixth system.



FIG. 166. SHOULDER EXERCISE.

FIGURE 48 ENLARGED.—*Explanation:* Here we have the hardest of all the exercises in this series. It is not so wearying as that wherein the arms were moved while held in the shape of right angles, but it is more effective. Few pupils seem to understand this action at first. We must imagine a table behind the body and a wall in front of it. The right hand is uplifted so as to rest with its palm against the wall, as though to push it. The left hand is supposed to be placed upon a table trying to push hard down upon it. Here are two pushing movements that must be made on the same accent of the music, while the weight of the body is equally sustained on both feet as though to secure the strongest attitude possible. All this complication occurs on count *one*; on *two* the whole body is relaxed and takes the military position; on *three* the right hand pushes out and the left hand down; and so on to eight. After that reverse.

Figure 48.

SHOULDER EXERCISE.

SIXTH SET.

One two one two



FIG. 167. ARM EXERCISE.

FIGURE 49 ENLARGED.—*Explanation:* This opens a new series, passing from the shoulder to the arm. We commenced at the lower extremities and have come up by degrees to the ankles, knees, hips, waist, chest and shoulders; and we pass out from the last named to the arms. Of course it is very difficult to find any exercises that apply to the arm exclusively; it is a law of nature that one set of muscles seeks its leverage on another. In the movement above illustrated in Figure 151, the arm should be extended laterally on a height with the shoulder, the fist being clinched and palm-side down. On count *one* turn the arm over so that the fist will have its palm side up. On count *three* turn it down; and so continue for thirty-two counts with one hand, and the same number with the other. The best results are obtained by holding the arm very tense and solid all the while.

Figure 49.

ARM EXERCISE.

FIRST SET.

One two one two one two

The musical score is written for piano in B-flat major (two flats) and 2/4 time. It consists of six systems of two staves each. The first system includes counting words 'One two one two one two' above the first staff, with accents over the first notes of each measure. The notation features various chords, single notes, and melodic lines with slurs and accents. The piece concludes with a double bar line at the end of the sixth system.

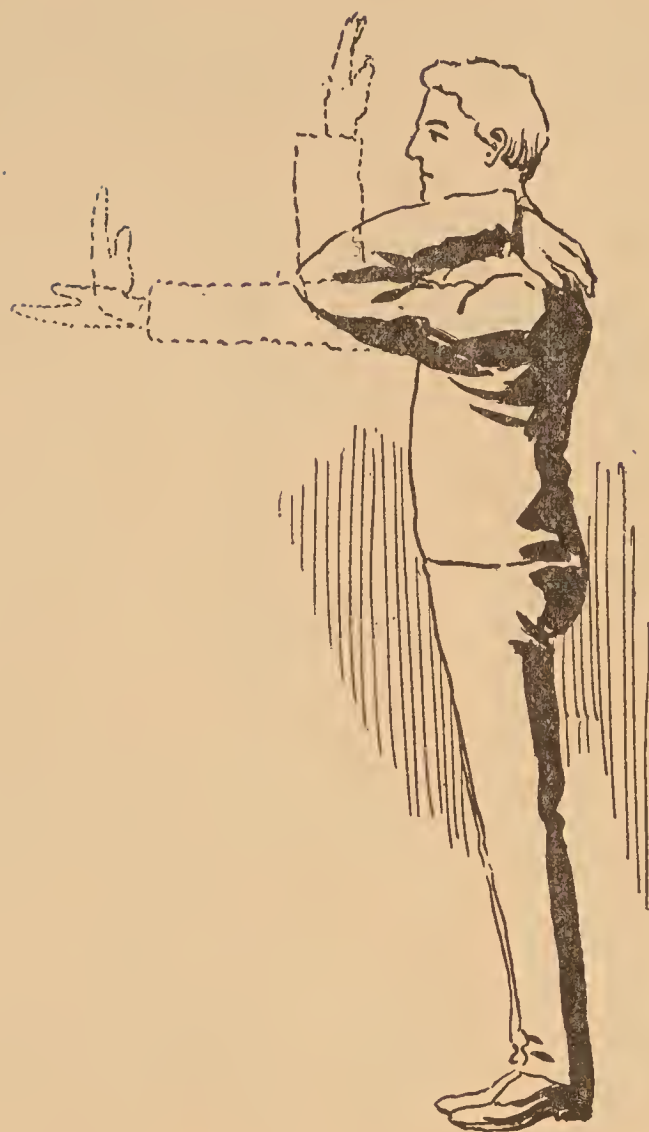


FIG. 168. ARM EXERCISE.

FIGURE 50 ENLARGED.—*Explanation:* While this movement does not weary the arm muscles so quickly as that of Figure 151, it brings into use the various parts instead of dealing with that member as one piece of anatomy. In commencing it the elbows may be very slightly raised above a horizontal position, and one arm may be employed. On count *one* lower the elbow a few inches; on count *two* lower the wrist, which really results in extending the arm; on *three* lower the hand, and on *four* go back to the raised position. Then do the same as to the other arm; and, finally, employ both arms together. Now, as the practice proceeds, the pupil must be taught to raise the elbows a little higher each time, until they point to the ceiling. This allows more vigor of movement. The action should be given with precision at each part, and much energy used.

Figure 50.

ARM EXERCISE.

SECOND SET.

One two three four five six seven eight

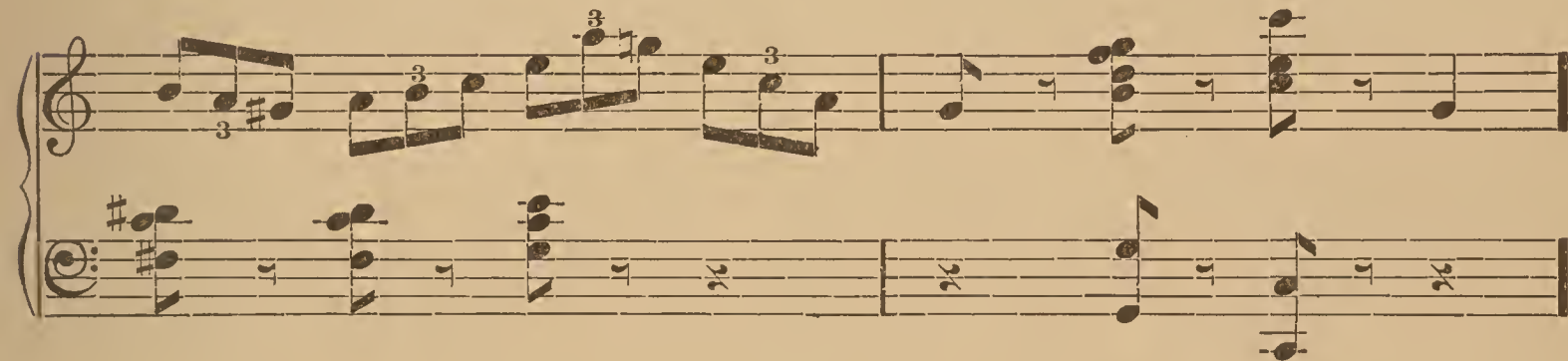




FIG. 169. ARM EXERCISE.

FIGURE 51 ENLARGED.—*Explanation:* This is the third of the arm movements. It is much more taxing than the other two that precede it in this series, although not as quick to weary the muscles. It can be done with the open hands at first, but the clinched fists give the arms greater vigor. It is of the utmost importance that the muscles be firmly tensed all the while. On count *one* swing the stiff arms from a lateral to a front position; but each arm must stop suddenly in front of the shoulder, and should not touch the other arm. When the sudden stop is made, it should be solid so as to keep the fists as far apart as the shoulders are. It is this power of checking a quick, strong movement that gives strength to the muscles. On count *two* move the stiff arms to a lateral position and stop as suddenly. Continue for thirty-two counts.

Figure 51.

ARM EXERCISE.

THIRD SET.

One two one two

f

f



FIG. 170. ARM EXERCISE.

FIGURE 52 ENLARGED.—*Explanation:* This is decidedly a magnetic movement, and is the best for invigorating the upper chest that has ever been invented. For the reason that it should be taught in person by a teacher it is rarely made clear by a printed description. There are two counts in the action; *one* raises the arms high over the head; *two* lowers them in a straight line down past the shoulders, the hands almost touching the latter as they pass; but the music should develop the broken character of each count. As the arms are raised on count *one*, the hands should be devitalized or made passive; as they descend they should gradually change to the fist-shape, then the fists should be clinched, then tensed to the utmost, all on count *two*. If you inhale deeply and hold the lungs full of air, you will realize how quickly you may accumulate magnetism in the body.

Figure 52.

ARM EXERCISE.

FOURTH SET.

The first system of musical notation consists of two staves. The top staff is in treble clef with a key signature of one sharp (F#) and a time signature of 3/4. It begins with a piano (*p*) dynamic marking. The melody is composed of eighth and quarter notes, with slurs indicating phrasing. The bottom staff is in bass clef with the same key signature and time signature, providing a harmonic accompaniment with chords and single notes.

The second system continues the musical exercise. The top staff features a mix of eighth and quarter notes, with some slurs. The bottom staff continues the harmonic accompaniment with chords and single notes, maintaining the 3/4 time signature and one-sharp key signature.

The third system of musical notation shows further development of the exercise. The top staff includes slurs and various note values. The bottom staff provides the corresponding harmonic support with chords and single notes.

The fourth system of musical notation continues the piece. The top staff has a slur over the first few notes. The bottom staff continues the harmonic accompaniment. A fermata is placed over a note in the top staff towards the end of the system.

The fifth and final system of musical notation concludes the exercise. The top staff features a first ending (marked '1') and a second ending (marked '2'). The bottom staff provides the harmonic accompaniment, ending with a double bar line.

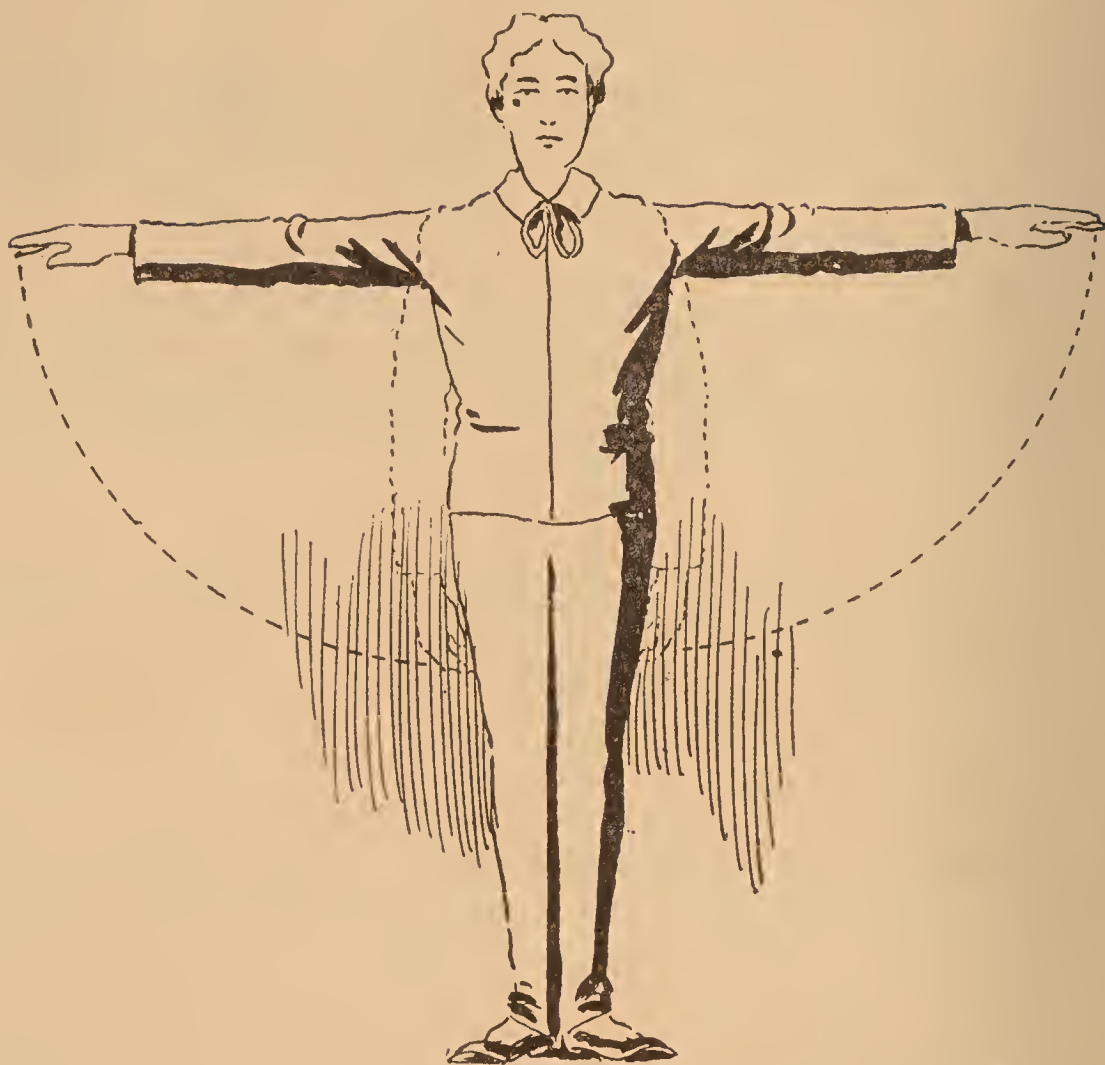


FIG. 171. ARM EXERCISE.

FIGURE 53 ENLARGED.—*Explanation*: In this movement the tax on the arm muscles becomes greater than in any other of the series thus far given. It can be commenced either way, just as the teacher catches the accent, or as the musician develops it. One way is to raise the arms laterally as the attitude of preparation; and bring them down stiff against the sides by an outward swing on count *one*; see that the hands describe arcs of circles, otherwise the whole value of the exercise is lost. On count *two* raise them to the attitude of preparation. The other way is to begin with the hands at the sides and to raise them on count *one* and lower them on count *two*. This depends largely upon the way the music is played. The time should be quite slow until the action is learned, then it may be made faster; but this is to be done gradually. Do not allow the muscles to become limp while the exercise is being performed.

Figure 53.

ARM EXERCISE.

FIFTH SET.

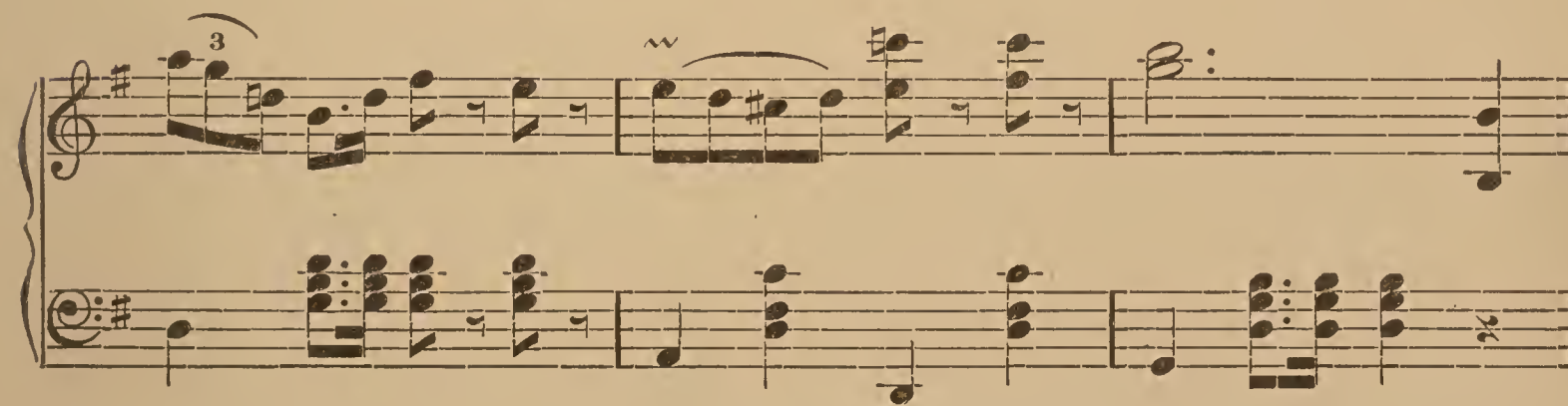




FIG. 172. ARM EXERCISE.

FIGURE 54 ENLARGED.—*Explanation:* The use of a spiral movement is the strongest means of developing the arms, provided all the preceding exercises in this series have been well mastered. Very few arms are over fat; those that are limp and flabby are lacking in beauty and will sooner or later show age by wrinkles or in other ways. A spiral action is a unique invention designed to give the muscles a twist while the arm is passing through a complication of evolutions. There are several lighter spiral exercises, but the one presented herein is the best and heaviest known. On count *one* cause the tightly clinched fists to descend in front of the body; on count *two* carry them out and around, up, over, down to the chest, and there describe a small but perfect circle. This is a good deal of work for count *two*, but it is done quickly. Count *three* is the same as *one*. The pupil will so enjoy the exercise as to get tired and not know it. Hence the benefit.

Figure 54.

ARM EXERCISE.

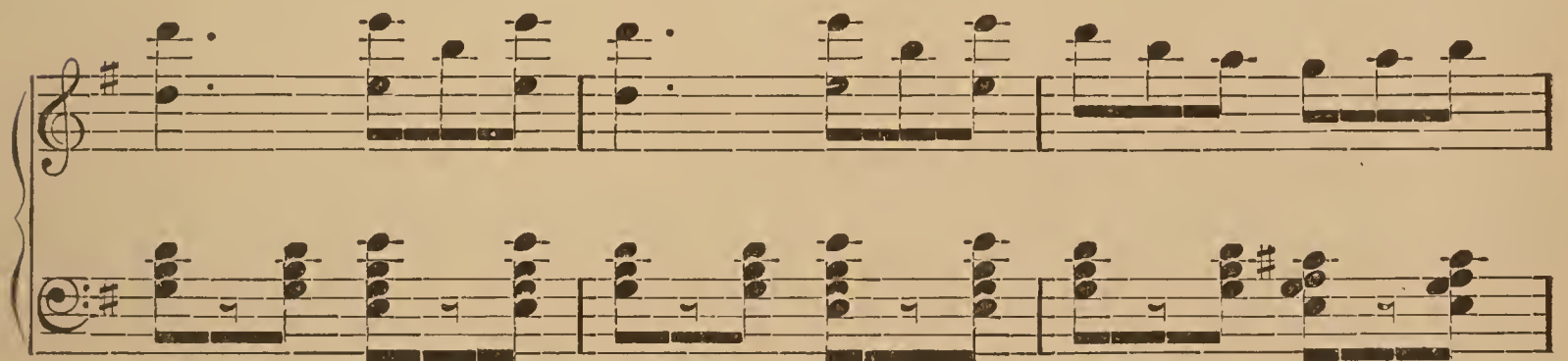
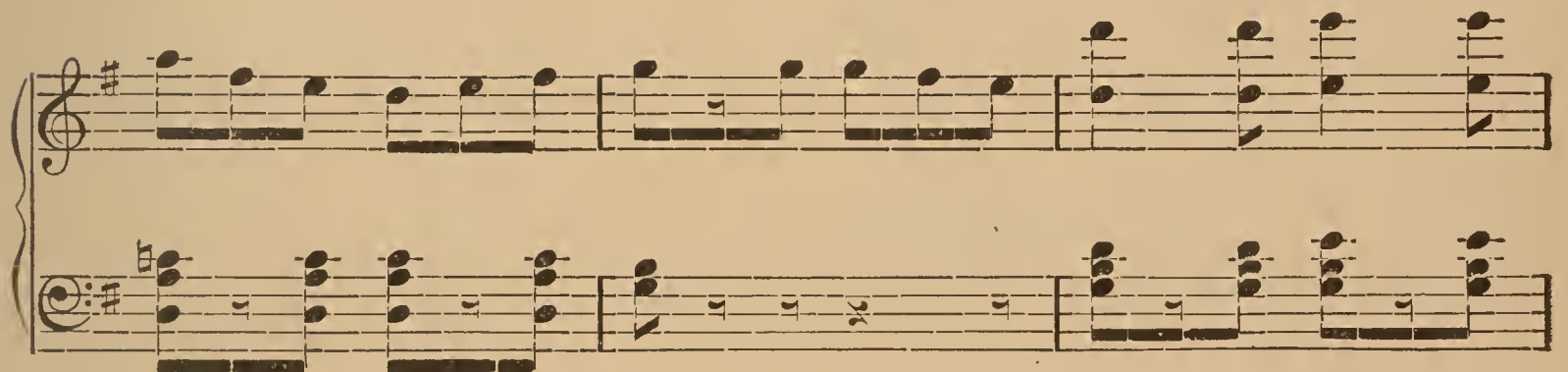
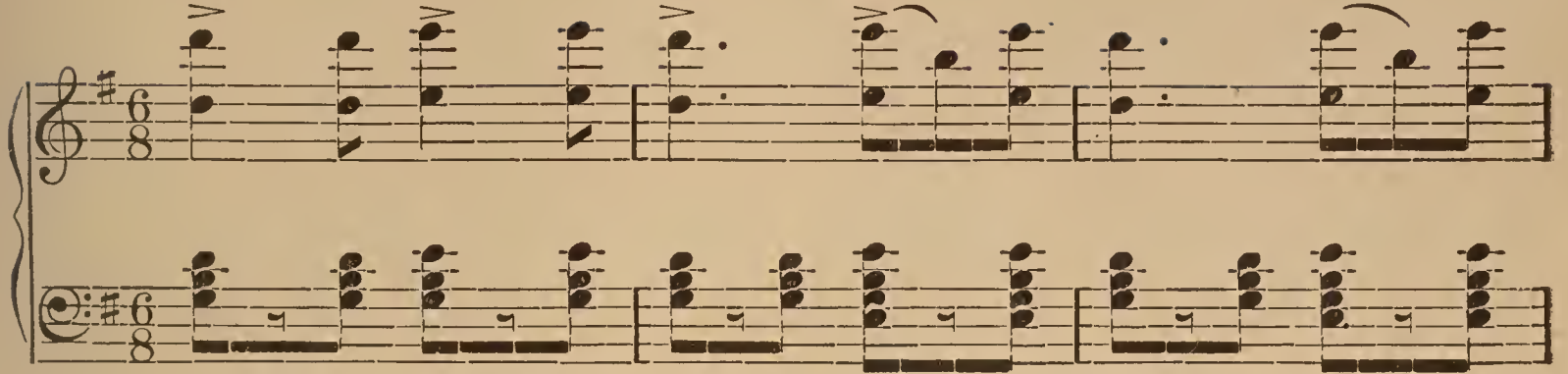
SIXTH SET.

One

two

one

two



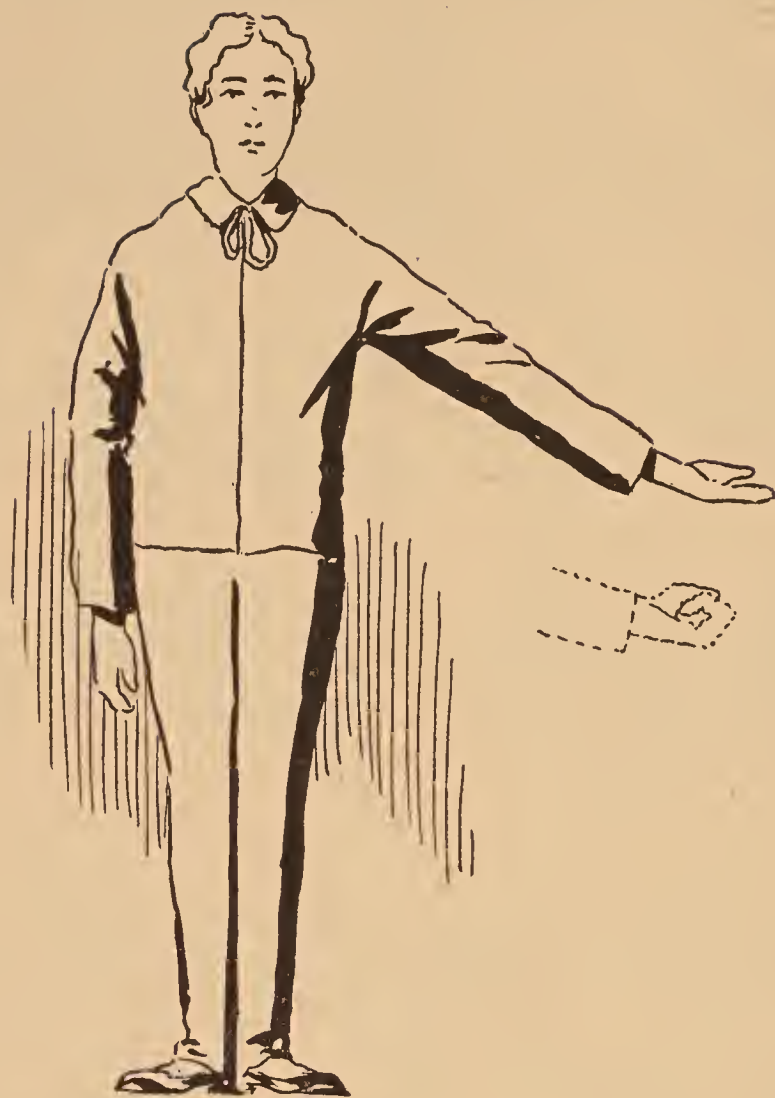


FIG. 173. HAND EXERCISE.

FIGURE 55 ENLARGED.—*Explanation:* The hand is a small part of the machinery of the body, but it is the most active, useful, and important. It has five digits, each having three sections, articulations or joints. The toiler uses many of these in one action, unless he is skilled in fine work. Nature intends them to be separately employed in order that the highest grace and usefulness may be attained. To keep the hand flexible the muscles should all be exercised equally a few minutes each day. The present exercise requires that the fingers and thumb be opened on count *one*, and closed on count *two*; but to do this well the arm should be extended so that the muscular effort may be freely devoted to the hand. It is important that the fingers should be spread widely apart, as the hand is fully open on count *one*; and that the fist should be tightly clinched on count *two*. Continue until tired.

Figure 55.

HAND EXERCISE.

FIRST SET.

One two

The musical score for Figure 55, First Set, consists of six systems of piano and treble clef staves. The key signature is one sharp (F#) and the time signature is 2/4. The first system includes the instruction 'One two' above the first two measures. The first measure of the first system has a forte (ff) dynamic marking. The score is written for the right hand, with the piano part in the bass clef and the treble clef part in the treble clef. The notation includes various musical symbols such as notes, rests, and dynamic markings.

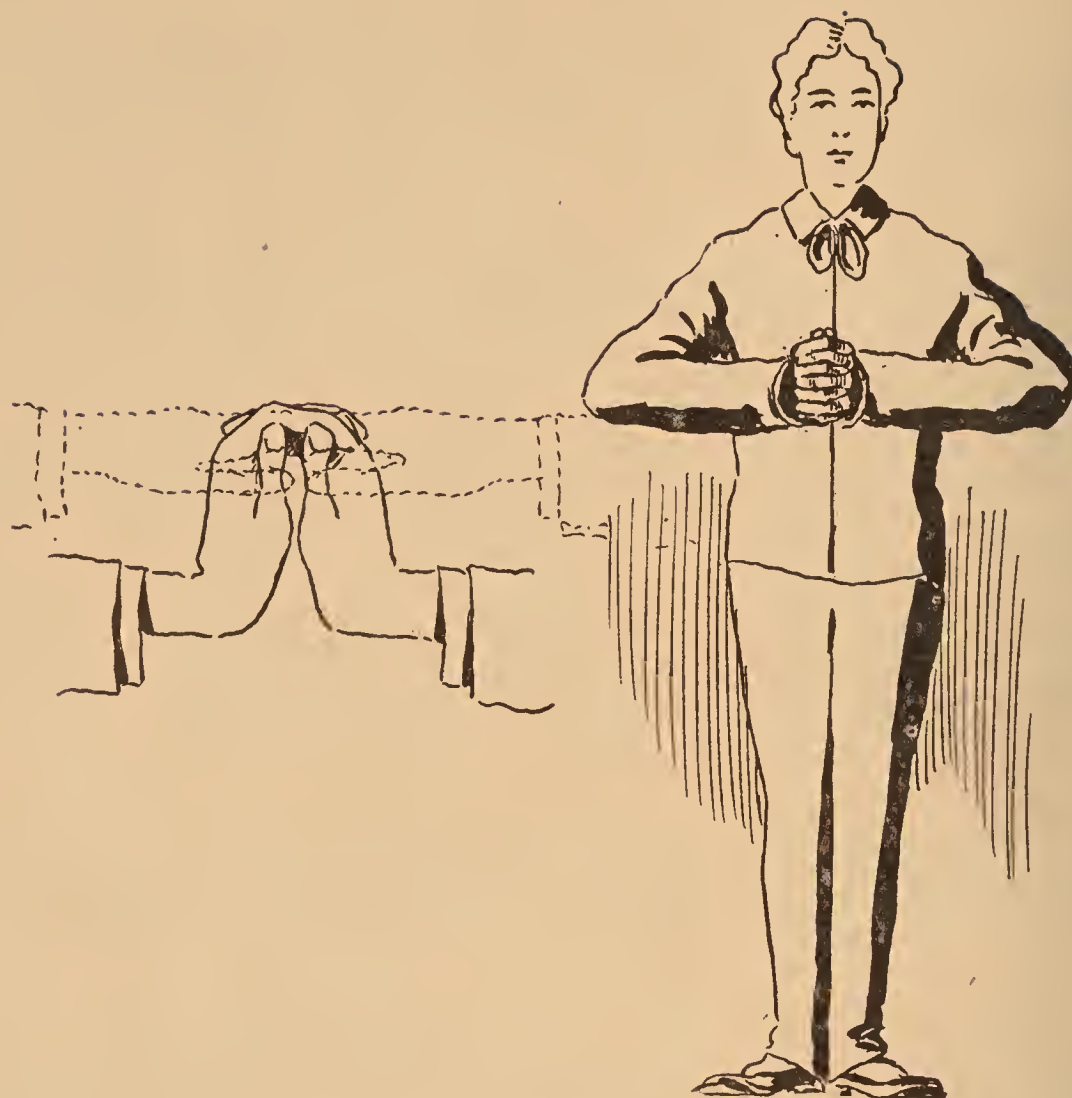


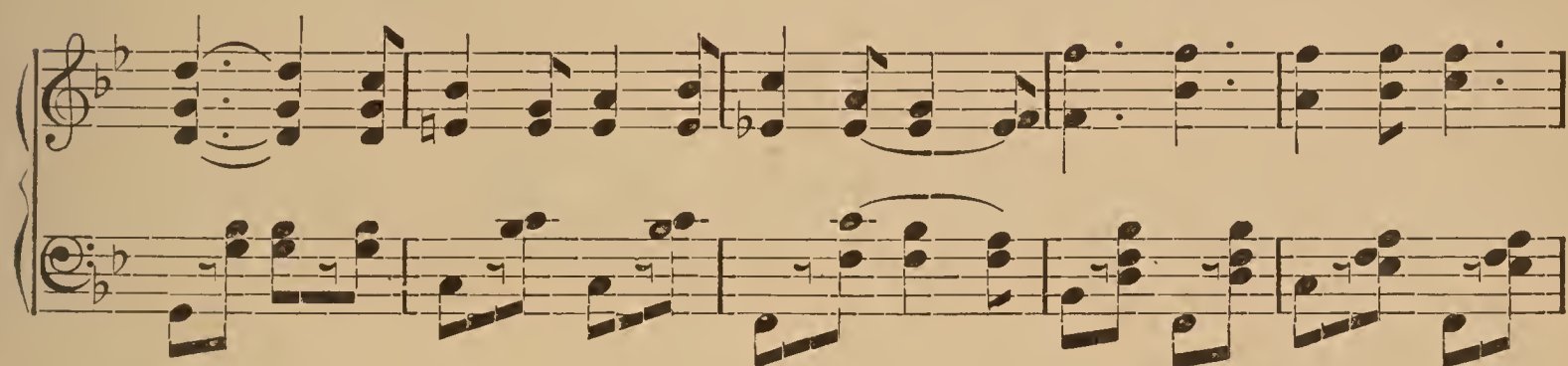
FIG. 174. HAND EXERCISE.

FIGURE 56 ENLARGED.—*Explanation:* This action, like that of Figure 157, employs all the muscles of the hands, and in a very thorough manner. The fingers should be interlaced as in the illustration. On count *one* open the palms so that the two hands will form one straight line; on count *two* shut the palms hard together. If this is done directly in front of the lower line of the chest, it will be very easy to perform a great number of times without weariness; but if the arms are extended as far forward as possible, the hand muscles are slightly more taxed. We suggest eight counts in the first-mentioned position; eight counts in the forward position; eight more with the hands as low down as possible; and eight above the head. The muscles must not be relaxed; they are to be firmly tensed all through the movements.

Figure 56.

HAND EXERCISE.

SECOND SET.



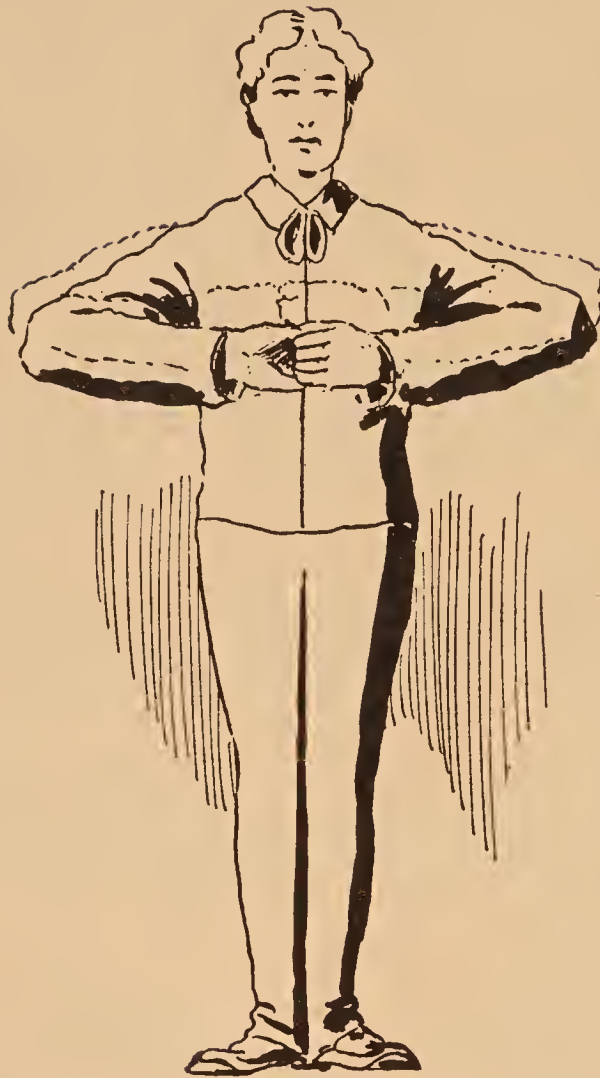


FIG. 175. HAND EXERCISE.

FIGURE 57 ENLARGED.—*Explanation:* The movements in the hand series now grow more severe and more important. Figure 159 combines the arm muscles largely with those of the hand, but only to aid the latter by a new use, one that is rarely met with in exercise. The fingers should be hooked together; and, through all the practice, the elbows must seek to break the hold of the fingers by a strong and continued outward pulling. It is a good exercise for the arm, but a far better one for the hands. Make the pulling as strong as you can. On count *one* bring the hands to the chest; on count *two* extend them forward as much as the length of the arms will allow. You will then see the peculiar power of the exercise. Do not forget to keep up the constant lateral effort of the elbows to pull the hands apart. Go to all parts of the chest on the odd numbered counts.

Figure 57.

HAND EXERCISE.

THIRD SET.

One two one two

The musical score is written for piano in 6/8 time. It consists of four systems of two staves each. The first system includes dynamic markings *f* and *p*, and articulation marks like accents and slurs. Fingerings are indicated by numbers 1-3. The exercise concludes with a double bar line.



FIG. 176. HAND EXERCISE.

FIGURE 58 ENLARGED.—*Explanation:* A comparative glance should be given to the hand exercises that thus far have been introduced in this series. The first consisted of opening and shutting the hand; the second taxed the muscles under the obstacle of the interlaced fingers; the third tested the pulling powers of the hand muscles; and now the fourth is designed to test the pressing powers. Place the palms together and hold them against each other as firmly as you can, as though glued by your effort. On count *one* carry to the right shoulder; on count *two*, out in front; on count *three*, to the left shoulder; on *four*, out in front; and so on for thirty-two counts, all the while keeping the hands firmly against each other as though one were seeking to push the other out of place. They may then be carried to the right and left lower lines of the chest in turn.

Figure 58.

HAND EXERCISE.

FOURTH SET.

One two one two

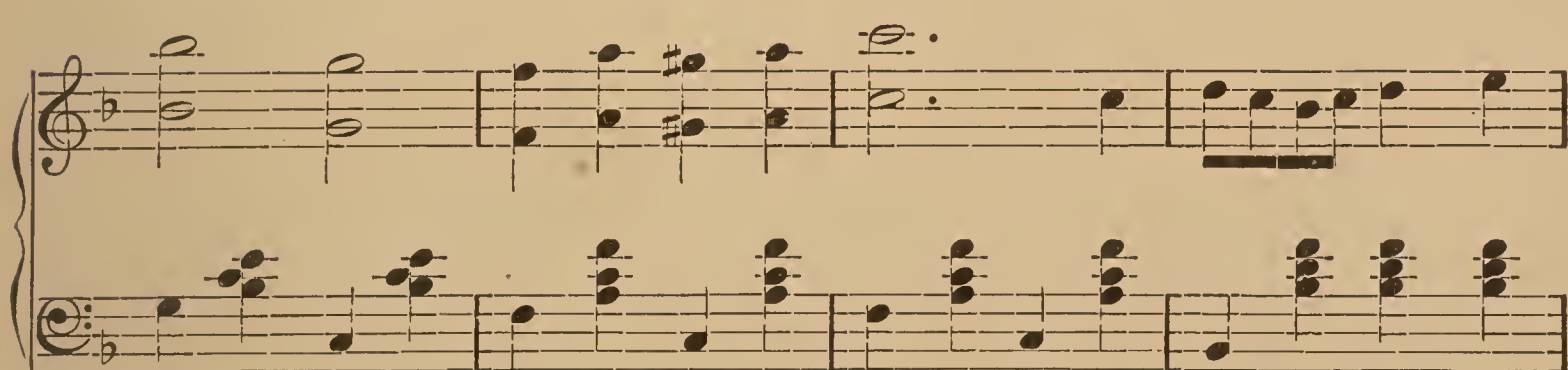
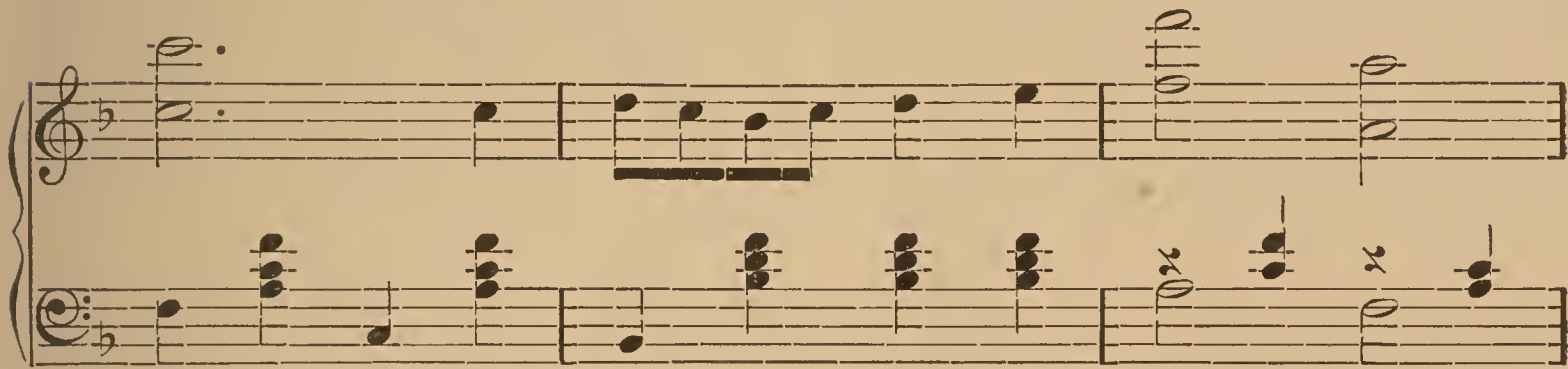




FIG. 177. HAND EXERCISE.

FIGURE 59 ENLARGED.—*Explanation:* Raise the left hand, not above the shoulder, but out from it on a high elevation. Lower the right hand so as to form two obliques, an upper and lower one. Each arm must reverse its position; the left arm coming down to the lower left side, but extended out; and the right arm coming up to the upper right altitude. Each hand describes a semicircle, or the larger part of one. The purpose is to cause the hands, palms and fingers also, to strike each other as they pass. This differs materially from a direct blow of two hands coming against each other. Here there can be no severe blow, as the action is such as to prevent it. The strongest effort will only result in the surfaces skimming past each other.

Figure 59.

HAND EXERCISE.

FIFTH SET.

This musical score is for a hand exercise in 3/4 time, marked 'p' (piano). It is divided into five systems, each with a treble and bass staff. The key signature has one flat (B-flat). The first system includes a 'FIFTH SET' label. The notation features various musical elements: eighth and sixteenth notes, rests, and chords. The exercise concludes with a double bar line and repeat signs (two dots) in the final measure of the fifth system.



FIG. 178. HAND EXERCISE.

FIGURE 60 ENLARGED.—*Explanation:* When the hands are cold the quickest way to warm them is to perform the movements of Figure 162. It is, however, not possible to obtain warmth either in the hands or feet unless there is a sufficient supply of nutritious food in the system. To eat a light breakfast is sure to leave the blood weak for the whole day. The furnace needs its fuel in advance of use, not when it is getting ready to rest. Music is of the highest importance in developing the vim and spirit of an exercise. On count *one* strike the hands in front of the body; on count *two*, at the back, or behind the body; keeping the arms straight and stiff, so as to throw the energy into the hands. At first the movement should be as slight as can be conveniently made; then permit it to be enlarged, and add force to the blow at the same time.

Figure 60.

HAND EXERCISE.

SIXTH SET.

This musical score is for a hand exercise, labeled 'Figure 60. SIXTH SET.' It is written for piano in B-flat major (two flats) and 2/4 time. The score consists of six systems, each with a treble and bass staff. The first and fourth systems begin with a forte (*ff*) dynamic marking. The melody in the treble staff is characterized by eighth-note patterns, often beamed in pairs, and includes various rests and ties. The bass staff provides harmonic support with chords and single notes. The exercise concludes with a double bar line at the end of the sixth system.



FIG. 179. NECK EXERCISE.

FIGURE 61 ENLARGED.—*Explanation:* We come now to the neck series; and, small as the movements may seem, they are of the most vital importance both in point of health and voice. They reach far beyond the location of the neck, carrying their beneficial action to the inner portions of the lungs and especially along the bronchial passages, as the shoulders extend their influence of action to the back and front muscles of the torso. The neck movements alone are capable of building strength of voice owing to the new flesh and vigor of muscular formation which they invite. The same exercises reach the weak trachea and bronchial tubes, and supply nutrition of structure where the best of medical aid is sure to fail. In this, the first, the chin is thrown forward until it rests upon the chest, for count *one*; and the head is thrown far backward for count *two*.

Figure 61.

NECK EXERCISE.

FIRST SET.

One

two

one

two

The musical score is titled "Figure 61." and is labeled "NECK EXERCISE." and "FIRST SET." It is written for piano, indicated by the "ff" (fortissimo) dynamic marking. The score consists of six systems, each with two staves. The key signature is one flat (B-flat) and the time signature is common time (C). The first system includes the labels "One" and "two" above the first two measures, and "one" and "two" above the next two measures. The score features various musical notations including whole notes, half notes, quarter notes, eighth notes, and sixteenth notes, as well as rests and dynamic markings like "ff".



FIG. 180. NECK EXERCISE.

FIGURE 62 ENLARGED.—*Explanation:* The movement in Figure 163 requires a forward and backward action of the head. In this it is a lateral action. It makes no difference whether the first count is to the right or to the left; yet the teacher must see that the same direction is taken by the whole class together. There is a feeling of discord and embarrassment when the right and left actions are seen on the same count; as where some pupils incline the head to the right while others incline it to the left. The muscles of the neck must be tensed in all the movements of this series, for a weak or flabby action is of no value. It wastes energy and does not draw a new supply. All tensing or energizing is sure to bring nutrition to the parts used, if a good meal has been eaten prior to the practice.

Figure 62.

NECK EXERCISE.

SECOND SET.

One two one two

mf

mf

mf

mf

mf

mf



FIG. 181. NECK EXERCISE.

FIGURE 63 ENLARGED.—*Explanation:* This is a combination of Figures 163 and 164, with the double advantage of a circular tendency of all the neck muscles. This tendency receives its support clear down inside the lungs, as any careful observer will at once perceive. We do not advise using the movement of Figure 165 until the full practice of Figures 163 and 164 has enabled you to obtain unusual flexibility of the neck muscles by large ranges. On count *one* incline the head to the right; on count *two* pass the head to a backward position, a movement not possible in the preceding figures; on count *three* pass the head to the left shoulder; and on count *four* pass the chin to the upper chest; on *five* reverse by passing the head to the left shoulder; and so proceed back to the starting point. The exercise is like its predecessors in position only, not in movements.

Figure 63.

NECK EXERCISE.

THIRD SET.

One two three four

mf *cres.*

8va...

f *p*

f



FIG. 182. NECK EXERCISE.

FIGURE 64 ENLARGED.—*Explanation:* This is a movement of far greater value than all three preceding in this series combined. It is, however, somewhat difficult to understand; for most pupils fail to see the difference between inclining the head to the side and turning it to the side. It never occurred to them that the head may be turned and yet not inclined at all, or inclined and not turned at all. One action gives a direct pull to the opposite muscles while those on the side of the inclination are relaxed after use; and the turn acts upon every muscle alike. Turn the head lightly, on count *one*, to the right; on count *two*, to the left; then, as the muscles are able to endure it, increase the range of the turn until a strong blow may be struck to the right and to the left. This is the best of exercises for strengthening the weak blood-vessels of the brain.

Figure 64.

NECK EXERCISE.

FOURTH SET.

The musical score for Figure 64, Neck Exercise, Fourth Set, is written for piano accompaniment. It consists of six systems, each with a treble and bass staff. The key signature is one sharp (F#) and the time signature is 6/8. The first system begins with a piano (*p*) dynamic. The second and fourth systems include a crescendo (*cres.*) marking. The piece concludes with a double bar line at the end of the sixth system.



FIG. 183. NECK EXERCISE.

FIGURE 65 ENLARGED.—*Explanation:* Here the work increases in difficulty. We do not believe this is any better than the one preceding—that is, Figure 166—but it fits in with all others and serves to reach muscles that cannot be so well exercised in any other way. The whole value of this movement is in the carriage of the head to a far backward attitude and a rolling of its weight from one side to the other. Incline the head so far back that you can see the wall of the room behind; on count *one* roll the head to the right shoulder blade; on count *two* roll it to the left shoulder blade; and so continue until thirty-two counts are made. If the attitude produces dizziness, it is an indication of weakness in the circulation of the blood, and it is well to stop until all unpleasant feelings have passed. The head movements will overcome the weakness in time.

Figure 65.

NECK EXERCISE.

FIFTH SET.

One
two
one
two



FIG. 184. NECK EXERCISE.

FIGURE 66 ENLARGED.—*Explanation:* This is the craning exercise. It is not by any means a beautiful one, being quite the reverse of that; but its efficiency is so great that it cannot properly be omitted from any system of scientific physical culture. The nearest in value to it for hygienic uses are the movements of Figures 166 and 167. Here the muscles are pulled from a much lower depth, and nutritive supply is invited more rapidly into the parts affected. On count *one* thrust the chin forward in a level line; do not turn the head, and do not raise or lower the chin. On count *two* draw the chin in as close to the neck as possible. There are nine directions in which the craning may be made; on a level line, to the front, the right oblique and the left oblique, making three; on a lowered line in the same ways; and likewise on an upper line. Of course a raising of the chin is necessary in the last named; and a dropping of the chin is necessary in the lowered line; but the craning action is not to raise or lower the chin.

Figure 66.

NECK EXERCISE.

SIXTH SET.

This image shows a page of handwritten musical notation, likely a score for a piano piece. The notation is arranged in six systems, each consisting of a treble staff and a bass staff. The key signature is one flat (B-flat), and the time signature is common time (C). The notation includes various musical symbols such as notes, rests, accidentals (sharps, flats, naturals), and dynamic markings. The first system has the words "One" and "two" written above the treble staff, with slanted lines indicating accents. The second system has a repeat sign in the treble staff. The third system has a repeat sign in the bass staff. The fourth system has a repeat sign in the treble staff. The fifth system has a repeat sign in the bass staff. The sixth system has a repeat sign in the treble staff and a dynamic marking "fz" (forzando) in the bass staff. The handwriting is in dark ink on aged, slightly yellowed paper.



FIG. 185. WHOLE BODY EXERCISE.

FIGURE 67 ENLARGED.—*Explanation:* These movements are all very hard and very taxing. In a course of hygienic cure the whole body movements should be omitted. When they can be performed without producing excessive weariness, they will indicate a fairly good state of the health. All the movements of this series are capable of being reduced to a very slight range. In the present exercise raise the right arm over the head on count *one*, at the same time lowering the body and reaching toward the floor with the left hand. This is an easy action when done lightly and in a few inches range; but the full movement requires that the hand shall almost touch the floor. On count *two* throw the left hand over the head and attempt to touch the floor with the right hand. All the muscles of the body are involved.

Figure 67.

WHOLE BODY.

FIRST SET.

One

two

one

two





FIG. 186. WHOLE BODY EXERCISE.

FIGURE 68 ENLARGED.—*Explanation:* This action is so complicated and variable that it may be performed in a number of ways and each be right. In the first place, it does not make any difference on which foot it begins; either the left or the right may be retired. The two hands may be clasped over the right shoulder for count *one*, or over the left, or may separately rest on both shoulders. The oblique movement from the right shoulder to the left knee is a slight advantage, as it brings into better use the many muscles of the body. On count *two* advance the retired foot to a forward position, at the same time bringing the hands from the shoulders to the knee. On count *three* take the position of preparation the same as would constitute count *one*. After eight counts reverse the attitude of the feet.

Figure 68.

WHOLE BODY EXERCISE.

SECOND SET.

One

two

one

two

The musical score is written for a piano in 3/4 time, featuring a key signature of one flat (B-flat). It consists of eight systems, each with a grand staff (treble and bass clefs). The first system includes vocal or rhythmic cues: 'One' and 'two' above the first measure, and 'one' and 'two' above the fourth measure. The notation includes various note values (quarter, eighth, and sixteenth notes), rests, and dynamic markings such as accents (>) and breath marks (v). The bass line is characterized by frequent chords and single-note patterns. The final two systems conclude with double bar lines and repeat signs (two dots) in the right hand of the grand staff.



FIG. 187. WHOLE BODY EXERCISE.

FIGURE 69 ENLARGED.—*Explanation:* While this is a much more elaborate movement, and seemingly more taxing than the others that precede in this series, it is an exercise that ladies and gentlemen of sedentary habits find easy to perform. Its results are quite beneficial, more so than those derivable from Figures 169 and 170, although those should by all means precede this and lead the way to it. The reason why the body is not made lame so easily is because of the bending at the hips, where the large and powerful muscles take the action very readily. A partial bending would not constitute a whole body movement. It is necessary that the torso become fully involved, even to the neck and shoulders. On count *one* let the arms be raised above the head, the hands being elevated and palms together; on count *two* let them come down to the floor by a long, curving sweep. Commence with the feet apart. To render the exercise more difficult, let the hands be carried farther to the back on their elevation, and farther to the back on their being lowered.

Figure 69.

WHOLE BODY EXERCISE.

THIRD SET.

One

two

three

four

five

six

mf

seven

eight

The musical score for Figure 69, Whole Body Exercise, Third Set, is written for piano in 3/4 time, key of D major. It consists of six systems of staves. The first system is labeled 'One' through 'six' and includes a 'mf' dynamic marking. The second system is labeled 'seven' and 'eight'. The third system continues the exercise. The fourth system includes a triplet of eighth notes. The fifth system includes a triplet of eighth notes. The sixth system includes a triplet of eighth notes. The score ends with a double bar line.

Details of Fig. 69.



Fig. 188.



Fig. 189.



Fig. 190.



Fig. 191.



Fig. 192.



Fig. 193.

The variations of the whole body movements are confined to explanations of the details of the figures that are not easy to understand otherwise. Figure 188 shows the position of count *one* with the hands above the head and the hands clasped. The feet should be placed apart as widely as is convenient for the strength of the muscles in the legs; the larger the lateral stride the better will be the tax on the whole body. On count *two* the hands, still clasped, are brought downward in a large, full forward swing, and made to pass the feet to a position further back. On count *three* the hands are carried upward to the high position, and then down again on count *four*. It is an excellent exercise to place a handkerchief about eighteen inches behind the body on the floor, then pick it up with the fingers on count *eight*. The real value of the movement is in the large semicircles which are described by the hands, and in the wide positions of the feet.

The same principles are involved in Figures 190 and 191, but the strides are in oblique lines and the action adapts itself to them. Stand with the weight on the right foot retired obliquely backward; on count *one* raise the hands high over the head and also obliquely back; on count *two* carry them forward and down in a large semicircle, parting them so as to pass each side of the left foot; on count *three* raise the hands again to the position of *one*, as in Figure 190; and so continue for eight counts. In making the eighth action allow both feet to come together in the military position, heels touching and toes turned out; then, on count *nine*, step obliquely backward as in Figure 192, raising the hands high over the head and back to make a straight incline. On count *ten* bring the hands over and down to the right foot. Repeat to end of count *sixteen*, then go back to the first movements as under Figures 190 and 191 for eight more counts, and finish at thirty-two with the final eight, repeating Figures 192 and 193. Let the whole body take full part in each detail of this action from the head to the feet. Bend at the waist and chest as well as at the hips, so that the body may be made very supple and strong at the same time. Few exercises excel this in value for the purposes of health. It must be remembered that this series includes the whole body movements, the chief purpose of which is to tax the entire strength rather than part of the body at a time; although this is done in its turn with others, and is not continuous. If it were, it would weary without affording the means of reaction that is so valuable.



FIG. 194. WHOLE BODY EXERCISE.

FIGURE 70 ENLARGED.—*Explanation:* This is named the “Gypsy Camp.” It teaches the easiest way of taking a sitting posture on the floor or ground from a standing position, and it employs every muscle of the body in complicated action without departure from the laws of grace. Count *one* throws the weight entirely on the left leg, so as to leave the right one free to move, and at the same time the left leg supports the body by its bending attitude, until the weight can safely be placed on the right knee on the floor without jar or blow. This is followed by count *two*, in which the right hand is placed on the floor and helps to sustain the weight. On count *three*, sit. On *four*, cross the knees and clasp the hands over one knee. This process of sitting is the best and most graceful, and may be done quickly by allowing the movements to blend together. Count *five* is the same as *three*; count *six* is the same as *two*; count *seven* places the whole weight on the left foot; count *eight* is the standing attitude. Reverse sides.

Figure 70.

WHOLE BODY EXERCISE.

FOURTH SET.

One two

The musical score is written for a piano and consists of six systems, each with two staves (treble and bass clef). The key signature is one flat (B-flat major), and the time signature is 2/4. The first two measures of the first system are marked 'One' and 'two' with accents. The music includes various chords, single notes, and rests, with some measures containing a '2' symbol. The score is a whole body exercise, likely for a physical education or dance class.

Details of Fig. 70.



Fig. 195.



Fig. 196.



Fig. 197.



Fig. 198.



Fig. 199.



Fig. 200.



Fig. 201.



Fig. 202.

Ralston. Physical Culture.

This is a peculiar and unusual whole body movement, combining the laws of grace, of poise and of strength in the most difficult of exercises for such combination. Figure 194, which is Figure 70 enlarged, shows the result of the first half of the exercise, and coincides with that seen in Figure 198. The start should be made in a standing position, with the hands at the sides, hanging free. On count *one*, come down on the right knee. In so doing it is essential to keep the entire weight upon the left side of the body and over the left foot; for the least shifting of the gravity to the right will throw one out of poise, and precipitate a fall on the right knee, with danger of injuring the knee-pan. As soon, however, as the right knee rests upon the floor, all the weight of the body should be easily and gracefully transferred to it. Then we are ready for count *two*. This consists in so inclining the body to the right that its weight is evenly divided between the right knee and the hand which is resting on the floor, palm down. On count *three* the hip, which has been poised between the hand and the knee, now swings around and rests on the floor, and in so doing it takes the support of all the weight. This is a sitting posture. On count *four* sit erect, and clasp the hands around the left knee. This is called the Gypsy Rest, or camp position, in physical culture.

To arise from the posture, the reverse movements are in the same relative counts. Thus on count *five*, which is the first in reverse order, the position of *three* is assumed by resting the hand on the floor; count *six* is like *two*, in which the weight is divided between the right knee and the hand; count *seven* is like *one*, the entire weight being placed upon the right foot; but on making count *eight* the weight is transferred to the left foot in the act of coming to an erect position. Many persons attempt to rise with the weight upon both feet, but this is always ungainly. After completing the eight counts it is well to reverse sides, coming down on the left knee on count *nine*, and so continue to the end of *sixteen*. Then go back to the other side for eight more and to the left again for the final eight. Perfect poise must be maintained at every stage of the exercise. This is attainable only by an ever present consciousness of the center of gravity, which is carried in the torso, or main body, and generally in the lower chest. This center of gravity should always be poised over the ball of the foot which is to sustain the weight of the whole body.



FIG. 203. WHOLE BODY EXERCISE.

FIGURE 71 ENLARGED.—*Explanation:* On count *one* let the body down upon the right knee in a lateral direction; not forward or backward. On count *two* place the right hand on the floor so as to support the weight of the torso at least on that arm; on count *three* rise to the kneeling position; on *four*, stand on the feet; on *five*, kneel laterally on the left knee, and repeat as before. Reverse at every four counts. When the weight of the torso is supported by the hand resting on the floor, the arm on the other side of the body should be elevated as high as possible. Every act of kneeling should be graceful and in perfect poise; but this is rarely seen. There is always a free foot in every action or movement that involves stepping, walking or kneeling, and no weight should be permitted on the free foot until it is ready to receive it. Herein is the secret of ease and grace.

Figure 71.

WHOLE BODY EXERCISE.

FIFTH SET.

One two three four five six

seven eight

p

p

Details of Fig. 71.



Fig. 204.



Fig. 206.



Fig. 208.



Fig. 210.



Fig. 205.



Fig. 207.

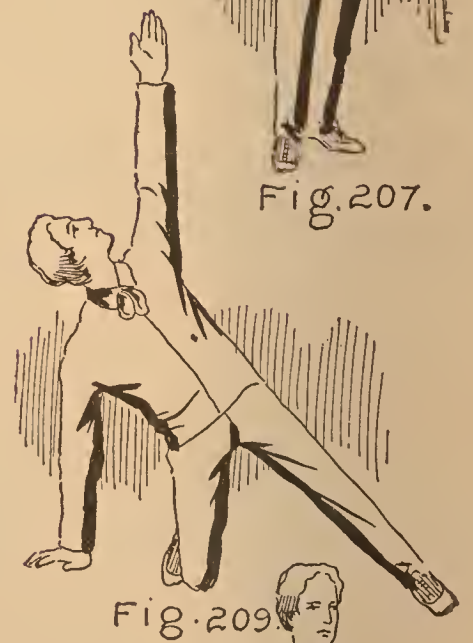


Fig. 209.

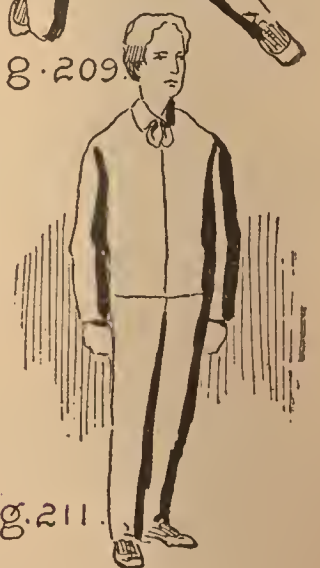


Fig. 211.

This is declared by many teachers to be the most interesting of the whole body exercises. It combines speed with an unusual degree of activity considering the range employed. On count *one* kneel on the left knee, coming down from the standing attitude of Figure 207 to the kneeling attitude of Figure 204. The entire weight should be supported on the right foot from the time the body commences its descent to the time it reaches the floor. This is poise, and no large change of attitude can be made without its perfection. In other words, the whole weight should rest on the one foot at every stage of the change, and not pass to the other until the change is complete. This culmination of kneeling in Figure 204 results in the ability to easily transfer the support to the knee in the act of coming to a rest.

The next change shifts the poise to the left hand and knee, in a lateral direction. At the same time the right arm is raised high above the shoulder as in Figure 205, and the right leg is straightened out to complete the balance in the opposite lateral from that of the left hand. The latter is aiding to support the weight of the torso on its own side. All the changes and adjustments occur on count *two*. On *three* the whole body is again poised as in Figure 204, the weight being on the left knee. On count *four* the weight is quickly thrown to the right foot and kept over it while the body is brought to a standing position as in Figure 207. From this position it is very easy to shift the weight to either foot and to use either side in kneeling.

Having counted *one* for kneeling on the left knee; *two* for the earth and sky action, *three* for the repetition of the kneeling on the left foot, and *four* for the full standing attitude; the reverse action should occur. On count *five* kneel on the right knee; on *six* take the earth and sky position as seen in Figure 209; on *seven* kneel again on the right knee; and on *eight* come up to the full standing position of Figure 211. This completes the action on both sides of the body. The counts should end with *thirty-two*. It must always be remembered that large range movements like these are very exhausting, and that frequent rests should follow, but not enough to admit of catching cold. A single muscle or a limited set of muscles may be wearied without affecting the general vitality; but this is not true of whole body action.



FIG. 212. WHOLE BODY EXERCISE.

FIGURE 72 ENLARGED.—*Explanation:* 'This is called the 'Turkish Salute. It is the acme of difficulty as a whole body exercise, and few persons do it well. It may be commenced from the military position as well as from a fixed attitude if a person is quick and flexible in the muscles. In such case the following details must all be performed as count *one*: Extend both hands at the sides and commence to move them backward in such a way that, when back, the palms will face toward the floor; place the right knee behind the left knee, so as to brace the support by the close position of the legs; bend the torso and neck as in bowing. On count *two* the torso should descend fully eight or ten inches at the shoulders; on *three*, as much more; and on *four* the back should be level. The next four counts will serve to bring the body gradually up to an erect attitude. The difficulty of the exercise is in the lack of a strong bracing of the legs. The right knee should be held hard against the left at the back of the latter. After the eight counts, let the action be reversed by placing the left knee behind the right, and so on.

Figure 72.

WHOLE BODY EXERCISE.

SIXTH SET.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (B-flat) and a time signature of 2/4. It contains four measures of music, with the first two measures grouped by a slur and the last two by another slur. A dynamic marking of *p* (piano) is placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing four measures of music, each consisting of a pair of beamed eighth notes.

The second system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat and a time signature of 2/4. It contains four measures of music, with the first two measures grouped by a slur and the last two by another slur. A dynamic marking of *p* is placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing four measures of music, each consisting of a pair of beamed eighth notes.

The third system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat and a time signature of 2/4. It contains four measures of music, with the first two measures grouped by a slur and the last two by another slur. A dynamic marking of *p* is placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing four measures of music, each consisting of a pair of beamed eighth notes.

The fourth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat and a time signature of 2/4. It contains four measures of music, with the first two measures grouped by a slur and the last two by another slur. A dynamic marking of *p* is placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing four measures of music, each consisting of a pair of beamed eighth notes.

The fifth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat and a time signature of 2/4. It contains four measures of music, with the first two measures grouped by a slur and the last two by another slur. A dynamic marking of *p* is placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing four measures of music, each consisting of a pair of beamed eighth notes.

Details of Fig. 72.



Fig. 213.



Fig. 214.



Fig. 215.



Fig. 216.



Fig. 217.



Fig. 218.



Fig. 219.



Fig. 220.

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The details of the Turkish salute are hard to explain without a living teacher or explicit illustrations. The best preparation is made by extending the hands forward to some imaginary person as though it were done to indicate welcome, at the same time standing with the weight upon the feet placed in the military position. This may all be done on count *one*. On count *two* pass the left foot around behind the right so that the knees will touch, but with the left knee behind the right, lowering the hands half way down to the sides as in Figure 214. On count *three* bring the hands to the sides, as low down as possible, while bracing the body firmly at the knees. The weight may be supported on both feet at this stage, or on the retired foot only. On count *four* the torso should be lowered until the back is parallel with the ceiling, and the hands extended to the rear, with the palms facing the floor. It will be noticed that the hands were facing upward in the position of count *one*, and that they have gradually turned down and reversed as they have passed backward. Thus in Figure 213 the palms face the ceiling, in Figure 214 they face partly down, in Figure 215 they begin to face the floor, and so on to the reverse position in Figure 216. This understanding of the hand change will enable the pupil to adjust the whole body to the attitude required.

At first it is not possible to lower the head and shoulders to the fully depressed position as seen in Figure 216. The chief obstacle will be the left leg, which must be thrown to a straightened attitude by withdrawing the middle of the body, thus releasing it. The support of the general weight will always be unsteady and even uncertain, as long as the knees do not brace themselves tightly against each other. Little by little the nature of the exercise will be fully understood and its rendition will be graceful and beautiful. Our illustrations are designed merely to show the crude outlines; but to see a class or even an individual pupil perform the action is to realize its real beauty. On count *five* the body is raised but partly, as in Figure 217; on count *six* it is raised a little more; on *seven* it is almost up, corresponding to Figures 219 and 214; and on count *eight* a full standing position is assumed. All these have taken a right lateral direction. On the next eight counts reverse the foot action and face to the left. Continue as usual. The smoothness of this exercise has much to do with giving it an effective beauty; and it is very easy to defeat this important end by a lack of perfect poise.



FIG. 221. RAPID EXERCISE.

FIGURE 73 ENLARGED.—*Explanation:* Any rapid movement of a muscle sets the blood throbbing quickly through the veins, and the nerves respond by a feeling of life. A quick step, a rapid lifting of the arm, or anything that involves speed, is of the highest value in waking up a sluggish body. Sometimes a headache that is due to a clogging of the system or a stagnation of the blood in the veins of the head, is instantly cured by a quick motion of some part of the body. In the present movement the right hand must be made to pass rapidly around the left, the latter being held still. After eight counts, reverse by keeping the right hand still and causing the left to pass around it. If the speed is good, there will be two or more revolutions on each count. Reverse by changing the direction, also by causing both hands to revolve about each other.

Figure 73.

RAPID EXERCISE.

FIRST SET.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 3/4. It begins with a piano (*pp*) dynamic marking. The first measure contains a quarter note G4, followed by eighth notes A4, Bb4, and C5. The second measure contains eighth notes D5, E5, and F5, followed by a quarter note G5. The third measure contains a quarter rest, followed by a quarter note G4. The fourth measure contains a half note G4 with a fermata. The lower staff is in bass clef with the same key signature and time signature. It begins with a quarter note G2, followed by eighth notes A2, Bb2, and C3. The second measure contains eighth notes D3, E3, and F3, followed by a quarter note G3. The third measure contains a quarter note G2, followed by eighth notes A2, Bb2, and C3. The fourth measure contains a half note G2 with a fermata.

The second system of musical notation consists of two staves, identical to the first system. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 3/4. It begins with a piano (*pp*) dynamic marking. The first measure contains a quarter note G4, followed by eighth notes A4, Bb4, and C5. The second measure contains eighth notes D5, E5, and F5, followed by a quarter note G5. The third measure contains a quarter rest, followed by a quarter note G4. The fourth measure contains a half note G4 with a fermata. The lower staff is in bass clef with the same key signature and time signature. It begins with a quarter note G2, followed by eighth notes A2, Bb2, and C3. The second measure contains eighth notes D3, E3, and F3, followed by a quarter note G3. The third measure contains a quarter note G2, followed by eighth notes A2, Bb2, and C3. The fourth measure contains a half note G2 with a fermata.

The third system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 3/4. It begins with a quarter note G4, followed by eighth notes A4, Bb4, and C5. The second measure contains eighth notes D5, E5, and F5, followed by a quarter note G5. The third measure contains a quarter rest, followed by a quarter note G4. The fourth measure contains a half note G4 with a fermata. The lower staff is in bass clef with the same key signature and time signature. It begins with a quarter note G2, followed by eighth notes A2, Bb2, and C3. The second measure contains eighth notes D3, E3, and F3, followed by a quarter note G3. The third measure contains a quarter note G2, followed by eighth notes A2, Bb2, and C3. The fourth measure contains a half note G2 with a fermata.

The fourth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 3/4. It begins with a quarter note G4, followed by eighth notes A4, Bb4, and C5. The second measure contains eighth notes D5, E5, and F5, followed by a quarter note G5. The third measure contains a quarter rest, followed by a quarter note G4. The fourth measure contains a half note G4 with a fermata. The lower staff is in bass clef with the same key signature and time signature. It begins with a quarter note G2, followed by eighth notes A2, Bb2, and C3. The second measure contains eighth notes D3, E3, and F3, followed by a quarter note G3. The third measure contains a quarter note G2, followed by eighth notes A2, Bb2, and C3. The fourth measure contains a half note G2 with a fermata.

The fifth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 3/4. It begins with a quarter note G4, followed by eighth notes A4, Bb4, and C5. The second measure contains eighth notes D5, E5, and F5, followed by a quarter note G5. The third measure contains a quarter rest, followed by a quarter note G4. The fourth measure contains a half note G4 with a fermata. The lower staff is in bass clef with the same key signature and time signature. It begins with a quarter note G2, followed by eighth notes A2, Bb2, and C3. The second measure contains eighth notes D3, E3, and F3, followed by a quarter note G3. The third measure contains a quarter note G2, followed by eighth notes A2, Bb2, and C3. The fourth measure contains a half note G2 with a fermata.



FIG. 222. RAPID EXERCISE.

FIGURE 74 ENLARGED.—*Explanation:* Raise the arms fully to the front, the hands being placed against each other. On counts *one* to *seven* gradually open the arms by separating the hands more and more until the arms are each back of the lateral position; then, on count *eight*, bring the hands together as speedily as possible. The distance traversed by the hands on seven counts is now re-traversed in one only. Yet that one should not be delayed in the slightest degree. It is better to try to make the return in less time than was employed in the seven steps of the opening action. The movement is pleasurable and is always fully enjoyed. It may be done slowly at first by having the music retarded, and speed may be added by playing the air in quicker time.

Figure 74.

RAPID EXERCISE.

SECOND SET.

One two three four five six seven eight

f

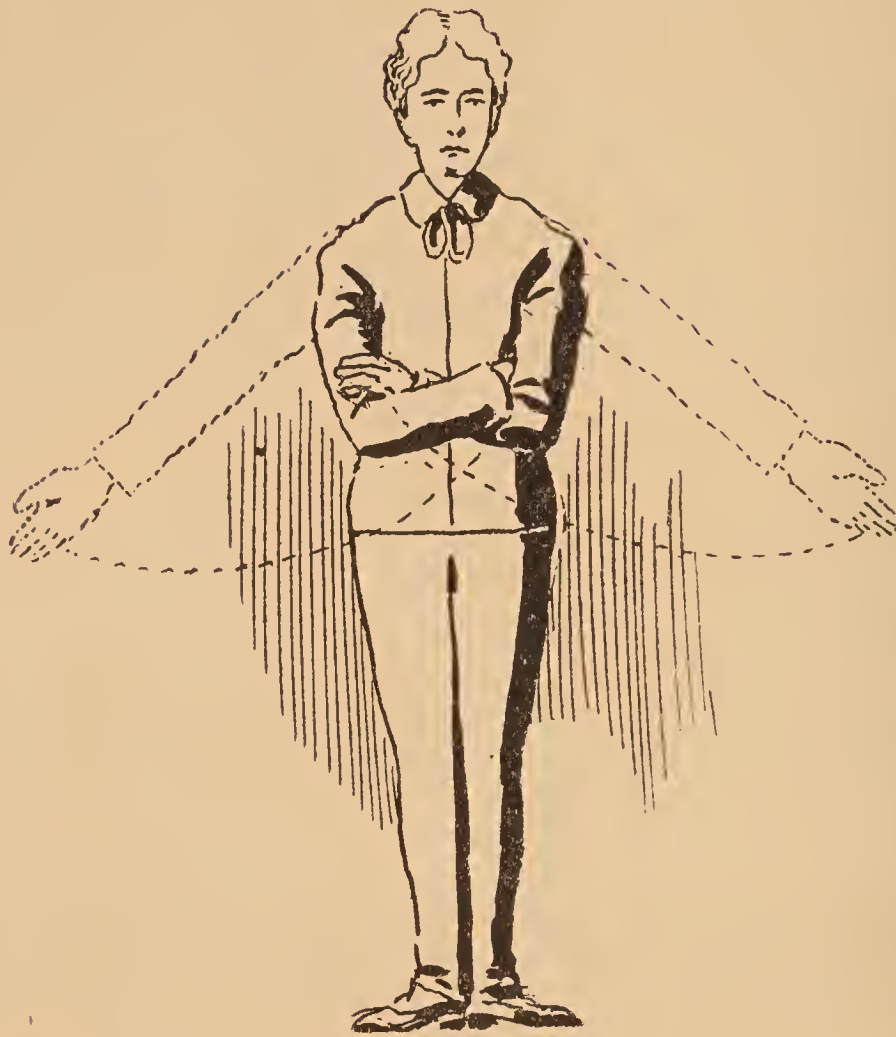


FIG. 223. RAPID EXERCISE.

FIGURE 75 ENLARGED.—*Explanation:* Experience in teaching this exercise indicates that the action should not be given at first in double form, or with two movements to one count, as is suggested in Figure 75. On count *one* throw the arms out to the sides, the hands being on a line with the hips. On count *two* throw them about the lower chest, crossing them in so doing. When this has been done for thirty-two counts, the double movement may be tried. On count *one* throw the arms out and then in and about the chest; on count *two* throw them out and in likewise; and so on for sixteen counts. This requires much speed, and is very exhilarating and invigorating if the breath be held part of the time. There is additional advantage in maintaining a fully extended chest during the whole exercise.

Figure 75.

RAPID EXERCISE.

THIRD SET.

One two one two

fz *p*

fz *p*



FIG. 224. RAPID EXERCISE.

FIGURE 76 ENLARGED.—*Explanation:* There is a demand for a very rapid movement, in which the speed may exceed that of Figure 175. The music does not permit of counts or accents. Each pupil should seek to reach a higher rate of speed than the others. It will be noticed that there is a natural direction of turning the hand for rapidity of revolutions. Thus it is easier to turn to the right than to the left, yet both should be tried with one hand, then with the other. A gauge of speed may be set by describing a very small circle with the tip of the index finger, say an inch in diameter, making the revolutions very speedy; then attempting to increase the diameter to a foot or more without decreasing the speed. This is very taxing, yet it is most beneficial.

Figure 76.

RAPID EXERCISE.

FOURTH SET.

This musical score is for a rapid exercise, labeled 'Figure 76. FOURTH SET. RAPID EXERCISE.' It is written for piano in G major (one sharp) and common time (C). The score consists of eight systems, each with a grand staff (treble and bass clefs). The right hand (treble clef) features a melodic line with eighth and sixteenth notes, including some triplets and slurs. The left hand (bass clef) provides a steady accompaniment with eighth-note patterns. The exercise concludes with a double bar line and repeat signs in the final measure of the eighth system.



FIG. 225. RAPID EXERCISE.

FIGURE 77 ENLARGED.—*Explanation:* On count *one* strike backward with the right elbow, and on count *two* strike backward with the left elbow; repeat for thirty-two counts. Unless the highest speed is reached, the exercise will be merely a shoulder movement. The addition of rapidity changes its nature and its value. For systematic practice the following is preferable: On counts *one* to *eight* use the right arm only; on counts *nine* to *sixteen* use the left arm; on counts *seventeen* to *twenty-four* use both alternately; and on counts *twenty-five* to *thirty-two* use both arms together. The time may be doubled by increase in the time of the music, or by rendering two movements to one accent. All the while the muscles should be firmly tensed.

Figure 77.

RAPID EXERCISE.

FIFTH SET.

The musical score for Figure 77, Fifth Set, is a rapid exercise for piano. It consists of six systems of music, each with a treble and bass staff. The key signature is one sharp (F#) and the time signature is 2/4. The dynamics range from *mf* (mezzo-forte) to *f* (forte). The exercise features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. The first system begins with a *mf* dynamic. The second system continues the pattern. The third system includes a *p* (piano) dynamic marking. The fourth system includes a *f* (forte) dynamic marking. The fifth system continues the pattern. The sixth system concludes the exercise with a *f* dynamic marking.



FIG. 226. RAPID EXERCISE.

FIGURE 78 ENLARGED.—*Explanation:* This is the most enjoyable of the speed exercises, and becomes still more interesting by allowing the musician to increase the time of the music. It is an apparent attempt to take a big jump, with no prospect of realizing the expectation. On count *one* the fists are brought down from their raised position over the head to the lower attitude behind the knees. The latter are to be kept bent or in a flexible condition ready to spring. On count *two* raise the hands to the head just above the forehead, and lean back a few inches with the impulse of the music. Soon the knees, hips, torso and general body will be in a rocking mood, while the arms are passing rapidly from one elevation to the other, making constant preparations for imaginary jumps.

Figure 78.

RAPID EXERCISE.

SIXTH SET.





FIG. 227. LIGHT STEP.

FIGURE 79 ENLARGED.—*Explanation:* The eight steps now claim our attention. They are very interesting, and they have a twofold purpose. They serve to strengthen the muscles of the heart by reason of the special tax placed upon that organ, but persons who are subject to maladies of the heart should proceed slowly. What is a cure may be made a cause if taken too violently. The light steps also give lightness to the movements and carriage of the body. There are all sorts of ways of performing the movement of Figure 181, and several pages of description are devoted to it in another part of this volume. Here the swinging of the free foot is made to lift the body from the floor a short distance on each measure of a waltz.

Figure 79.

LIGHT STEP EXERCISE.

FIRST SET.

One two three one two three

Details of Fig. 79.



Fig. 228.



Fig. 229.



Fig. 230.



Fig. 231.



Fig. 232.



Fig. 233.

Details of Fig. 79. Continued.



Fig. 234.



Fig. 235.



Fig. 236.

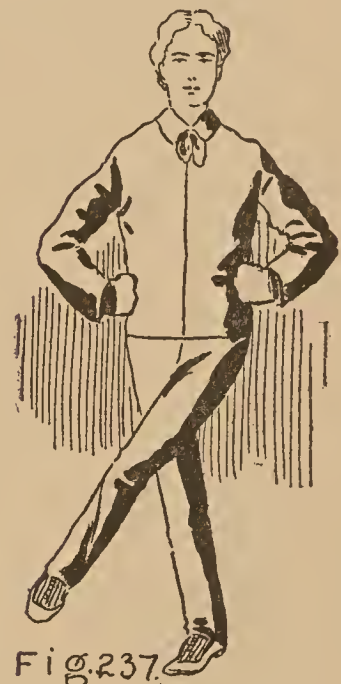


Fig. 237.



Fig. 238.



Fig. 239.

Details of Fig. 79 Continued.

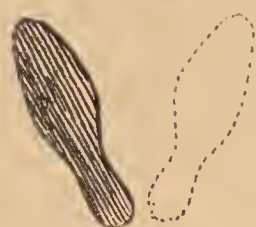


Fig. 240.



Fig. 241.



Fig. 242.



Fig. 243.



Fig. 244.

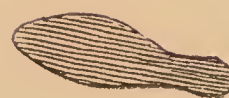


Fig. 245.

The light steps are designed to teach the quick and complete lifting of the body from the floor, in movements that are easy and graceful and with the least tax upon the general vitality. If taken in their proper place, after considerable strength has been acquired, they are of the greatest value in building up strength for a weak heart. We present three pages of illustrative explanations in Figures 228 to 245. The military position should be assumed in the start; on measure *one* move the foot in front, and back to the military position. Thus, Figures 229 and 228 show one full count. The *second* count moves the foot to the oblique front and back as in Figures 230 and 228. The *third* count moves the foot to the lateral and back; the *fourth*, to the oblique retired and back; and the *fifth*, to the direct retired, as in Figure 233, and returned to Figure 228. Then the other foot is used likewise. Thus far there has been no lifting of the body. Now repeat each action and use the feet alternately; thus, on count *one* advance and retire the right foot; on count *two*, advance and retire the left foot; on *three*, the right to oblique front; and so on.

The next variation requires a slight hop on the foot each time as it is moved; and this hop takes the place of the withdrawal. These hops should be very slight, as they at once attack the whole vitality, strengthening it wonderfully if taken lightly, and proving dangerous to a very weak heart if made violent. They are no more taxing than any dance step may be made. In Figure 234 the right foot is advanced and the hop is made on the left; in Figure 235 the left is advanced and the hop is made on the right; although in all these movements the hop may be omitted. In Figure 236 the right leg crosses the left in front and the hop is made on the left foot; in Figure 237 the left crosses the right, both Figures 236 and 237 being oblique crossings. In Figures 238 and 239 the direction is to the lateral. In Figures 240 to 245 the steps are called "Exchange," as one foot is thrust forward while the other is moved back. In Figure 240 the light steps show the starting attitude taken on count *one*, the dark steps being those intended to be taken on count *two*. In Figure 241 the light steps show the new position just taken, and the dark those to be taken on count *three*. In Figure 242 the light steps show the position taken, and the dark that to be assumed on count *four*; and so on. It will be noticed in Figures 242, 243, 244 and 245 that the changes go gradually to lateral steps, becoming graceful as well as interesting.



FIG. 246. LIGHT STEP.

FIGURE 80 ENLARGED.—*Explanation:* Some persons prefer the light step of this figure to that of Figure 181; but the latter is by far the more beautiful, while this is more taxing on the vitality of the body. It seems somewhat like Figure 181, but is quite the opposite. The weight is lifted on the left foot by an easy jump while the right foot is thrown out in the right lateral direction. This occurs on the accented note of a waltz measure. On the *second* measure the weight is lifted on the right foot while the left is thrown out laterally. When the exercise has been performed a few times it will be possible to throw both feet in the same direction, the left, that carries the weight on count *one*, going under the body to the right as the right is thrown out laterally, and the reverse being true on count *two*.

Figure 80.

LIGHT STEP EXERCISE.

SECOND SET.

One two three four five

six

The musical score is written for piano in 3/4 time, key of B-flat major. It consists of six systems of two staves each. The first staff of each system contains a melody with eighth and quarter notes, often beamed together. The second staff contains a harmonic accompaniment with chords and single notes. The exercise is divided into two sets of five measures each, with a final measure in the sixth system. The first set is labeled 'One' through 'five' and 'six' above the first staff. The second set is unlabeled but follows the same pattern. The key signature has two flats (B-flat and E-flat). The time signature is 3/4. The notation includes various musical symbols such as clefs, key signatures, time signatures, notes, rests, beams, and slurs.



FIG. 247. LIGHT STEP.

FIGURE 81 ENLARGED.—*Explanation:* This is the imitation of running while standing still, as it is sometimes described. The body does not advance at all, but the legs have the regular motion of running. This is still more beneficial to a weak heart, if done lightly and a very little at a time. Of course it is dangerous to run or exert one's self in a violent manner. Deaths have ensued from over-efforts. But the modern cure of heart disease in many of its forms is by light step movements. Let the run be as easy as a walk at first, raising the feet but a few inches. After a while raise the feet higher. This method of change alone determines the tax on the heart, except that the time of the music may be increased. No muscles can be strengthened, unless they are taxed by some wearying effort; but the exertion should not go to the line of injury.

Figure 81.

LIGHT STEP EXERCISE.

THIRD SET.

This musical score is for a piano exercise in G major, 2/4 time, consisting of 32 measures. It is divided into four systems, each with a treble and bass staff. The exercise features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. Measures 1-8, 16-24, and 32 are marked with a '2/4' time signature. Measures 9-15, 25-31, and 33-39 are marked with a '3/4' time signature. The score includes dynamic markings such as accents (>) and slurs. The key signature is one sharp (F#), and the time signature is 2/4.

Details of Fig. 81.



Fig. 248.



Fig. 249.



Fig. 250.



Fig. 251.



Fig. 252.



Fig. 253.

The variations of this exercise are among the most interesting in the system. In Figure 248 the movement is similar to that of treading. On count *one* the right foot is to be raised about an inch; on count *two* the left foot is to be likewise raised; and so continue for sixteen numbers. On the next count raise the foot about two inches. The intention is to keep on increasing the height until the movement of Figure 249 is reached. This again is increased until the higher altitude of Figure 250 is acquired. These three movements are degrees of each other.

In the running action of Figure 251 the exercise at once changes its nature. The lifting and lowering of the feet in alternate movements as seen in the three preceding figures is developed into an actual attempt at running by introducing that motion. It is possible to assume all the appearance of real running in this exercise, and yet not move forward. We do not wish any onward action, for that of itself is still another and more common exercise. It is even possible to take the running backward while making all the appearance of going forward. This can be practiced as lightly or as heavily as the pupil may decide. The better action is that of running without moving forward or backward, and with short, easy steps at first. The practice taxes the muscles and vitality of the heart, for which reason it should be used to strengthen and not exhaust that organ. When the breath comes hard, it is evidence of too great an exertion in such cases. The heart is constantly growing weaker when it is not taxed at all; but this does not imply that a sudden increase of its accustomed efforts should be adopted. The gentlest gradations alone can serve to give it new life.

The variations under Figures 252 and 253 are safeguards in cases of weak hearts; for it is almost impossible to overdo them. In Figure 252 the knees should be held tightly against each other while the steps in running are made on the balls of the feet. This requires an advance of the body in a pleasant and exhilarating action. In Figure 253 the ankles are held tightly against each other, and the running is made on the toes, or a few inches farther forward than when on the balls of the feet. The music may be played slowly or rapidly. The smaller the exercise in range, the faster may be the music. The teacher must see to it that the pupil whose heart is weak does not have the opportunity for over-exertion. The running, like any of the light steps, may hold the interest too long, and exhaustion may follow unexpectedly.



FIG. 254. LIGHT STEP.

FIGURE 82 ENLARGED.—*Explanation:* This is a peculiar movement that cannot be described easily in words nor shown in a picture. Its chief characteristic is its lateral action. To learn it, practice stepping to the right, then to the left, then to the right, etc., while the chest and face are to the front. As you step to one side by a lateral movement, bring the other foot up to the strong one, and rise slightly on the toes of both feet. Then move to the other side, change the weight, bring up the free foot and rise on the toes. The counts are generally full measures. On *one* move the right foot to the right side, slide the left foot toward it, and rise. On count *two* move the left foot to the left side, slide the right foot toward it, and rise. Continue this for sixteen measures. Then vary it by going ahead in oblique directions in place of those to the sides.

Figure 82.

LIGHT STEP EXERCISE.

FOURTH SET.

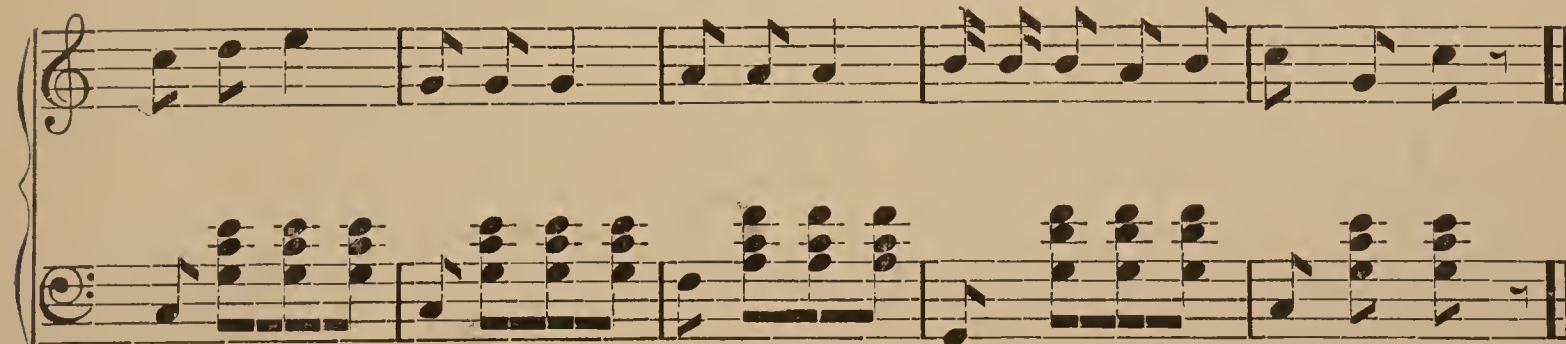
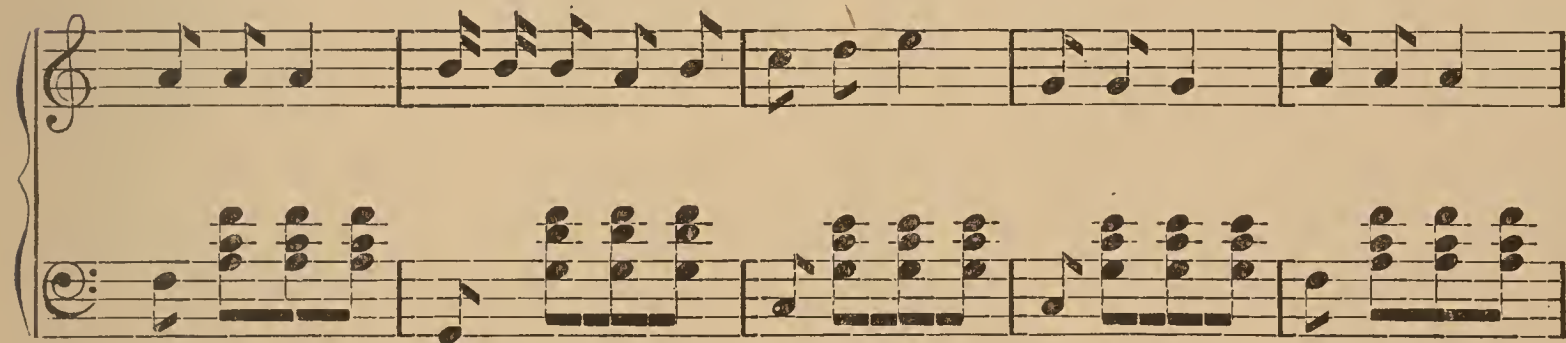
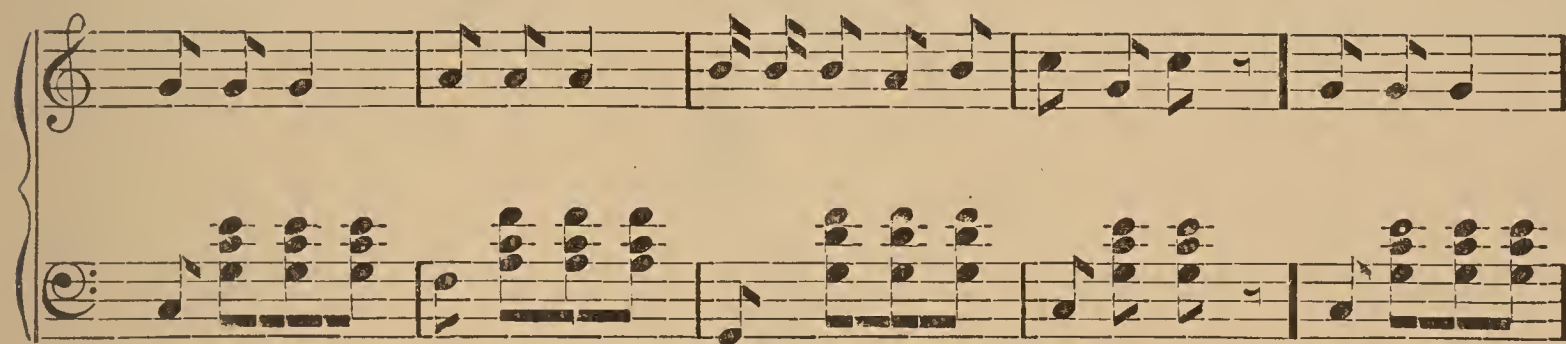
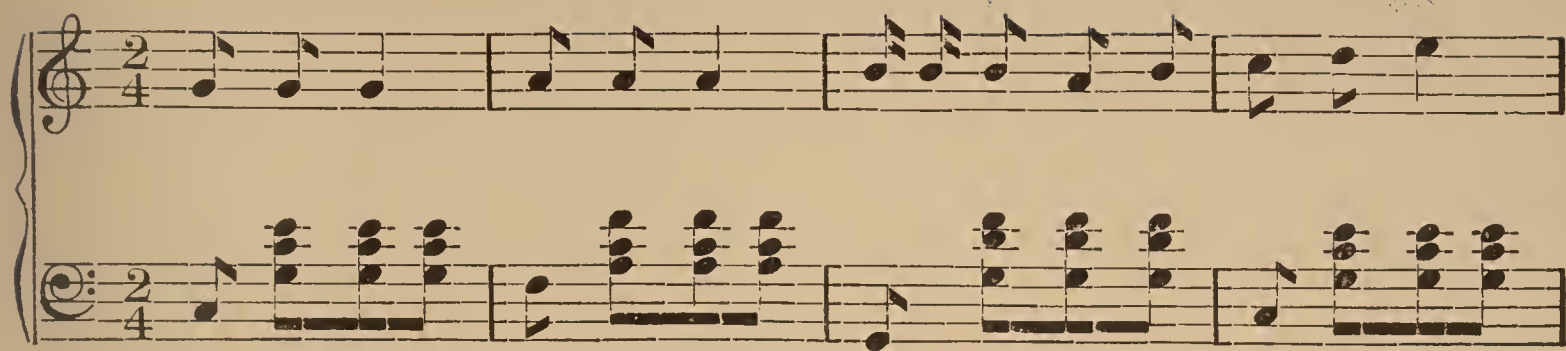




FIG. 255. LIGHT STEP.

FIGURE 83 ENLARGED.—*Explanation:* No picture can convey an idea of this whole exercise. A brief description will appear here, and a more extended one in another part of the volume. It is considered by some the most beautiful exercise in the Ralston System. On count *one* place the fists in front and behind the waist, and take a step to the right oblique forward direction. On count *two* bring up the left foot and take another step in the same direction. On count *three* stoop over to the right oblique, extend the hands held low down in front of the knees, as though they held a rope, and pull backward to the left oblique, at the same time taking a double step; and on count *four* repeat count *three*. This is a combination of the sailor's stage dance in counts *one* and *two*, and the rope dance in *three* and *four*.

Figure 83.

LIGHT STEP EXERCISE.

FIFTH SET.

This musical score is for a piano exercise in G major, 6/8 time. It consists of six systems, each with a treble and bass staff. The exercise is characterized by light, stepwise motion in the right hand and sustained chords in the left hand. The right hand features eighth-note patterns with accents and slurs, while the left hand provides a harmonic foundation with chords and occasional moving lines. The piece concludes with a final cadence in the right hand and a sustained chord in the left hand.

Details of Fig. 83.



Fig. 256.



Fig. 257.



Fig. 258.



Fig. 259.



Fig. 260.



Fig. 261.

The sailor's lightstep is regarded by many as the most beautiful of all the system of physical training. The details which are pictured in the illustrations are caught from the crudest part of the exercise, and are designed to help the pupil at those turning points where the teacher may have difficulty in making explanations clear. We will assume that the body is to advance to the left oblique forward direction as is indicated in Figure 256, although that is the teacher's first attitude in this exercise. It should be remarked that the pupil is to move to the right, or first use the right side on count *one*, while the teacher uses the left side. This is intended to prevent confusion by having a teacher who is facing the pupil take the action in an opposing direction. On count *one* take a step to the right oblique forward, as in Figure 255. If you are the teacher you will go to the left oblique forward as in Figure 257. On count *two* bring the retired foot up to the advanced foot and take another step forward in the same oblique. The two Figures, 256 and 257, show the preparation and execution of each step. Thus, if the fists are placed in front and back of the waist, as there indicated, and the foot is brought up in a swinging motion as in Figure 256, the body is then in the attitude of preparation, which is executed in Figure 257. In Figure 258 the attitude of the feet and hands may be seen after count *three* has been executed, which is the first step backward. Count *four* is just like count *three*, and makes the second step backward, both being taken in an oblique direction, so as to bring the body to the position from which it started for count *one*.

The change of direction must occur on count *five*. Figure 259 shows count *one* for the pupil, or count *five* for the teacher, as far as getting ready is concerned. The execution of counts *five* and *six* are the same as in Figure 260, as two steps are taken, both being alike. Figure 261 indicates counts *seven* and *eight*, both being alike. The pupil is supposed to be pulling at a rope, with the head and body lowered. The steps backward should be long slides. The raising of the foot, as in Figures 256, 258, 259 and 261, is a rebound action which is readily acquired after a few trials. In the sailor's light step the rhythm is of the utmost importance, as well as the rocking swing which an easy and graceful movement may readily impart. Be careful to avoid putting the weight on the heels. Let the steps be as light as you can make them.



FIG. 262 LIGHT STEP.

FIGURE 84 ENLARGED.—*Explanation:* Here comes the rocking run made famous through the Ralston System. There is a fascination about it that is not hard to explain when it is once witnessed properly performed. Yet it is a severe test of a strong heart. We advise all persons of weak hearts to let it alone until a year or more of time has been devoted to the preceding light steps. Stand on the right foot, with the head down in front and the left foot raised behind, and on counts *one* and *two* give two jumps on the right foot. Then shift the carriage of the body so that the chest faces the ceiling above; put all the weight on the left foot, while the right is raised in front; and on counts *three* and *four* give two jumps on the left foot. The lower down the head is carried on counts *one* and *two*, and the farther back it is carried on *three* and *four*, the greater the effect and results.

Figure 84.

LIGHT STEP EXERCISE.

SIXTH SET.

This musical score is for a piano exercise in 4/4 time, key of D major (two sharps). It consists of eight systems, each with a treble and bass staff. The exercise features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. Triplet markings (a '3' over a group of notes) are used throughout, particularly in the treble staff. The bass staff often provides a harmonic accompaniment with chords and moving lines. A dynamic marking of *f* (forte) appears in the fourth system, indicating a change in volume. The piece concludes with a double bar line at the end of the eighth system.



FIG. 263. DEVITALIZING.

FIGURE 85 ENLARGED.—*Explanation:* A most important part of all scientific physical training is relaxation. The use of a muscle stiffens it as an incident to its being made stronger. This is seen in the hand set muscular system of a laborer. The non-use of a muscle causes it to become thin and atrophied, or wasted. Between these two extremes science must lead the way. A series of relaxing movements ought to find a place in all physical training, and there should be one such exercise in every set. The first herein is the devitalization of the hands. This must precede others that are to follow, for the hands are used in connection with all except part of Figure 188. Shake one hand first, having the fingers limp as strings; then use the other hand in the same way; then both together; and change by practicing with the hands in all elevations, at the sides, at the back, at the hips, at the shoulders, over the head and in lateral extensions.

Figure 85.

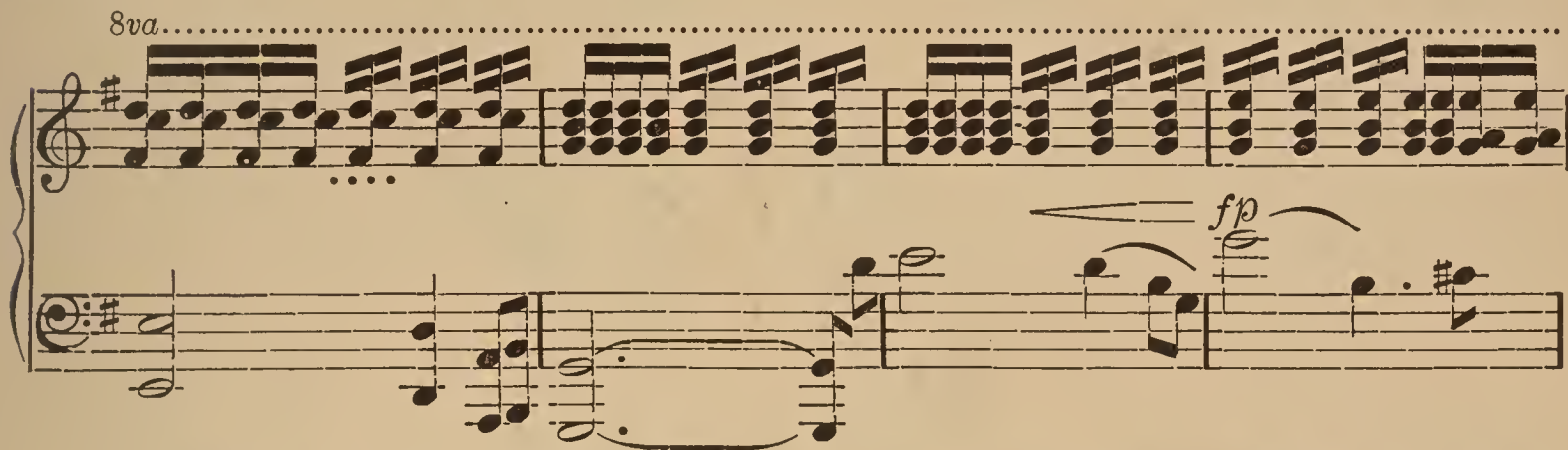
DEVITALIZING EXERCISE.

FIRST SET.


8va.....



8va.....



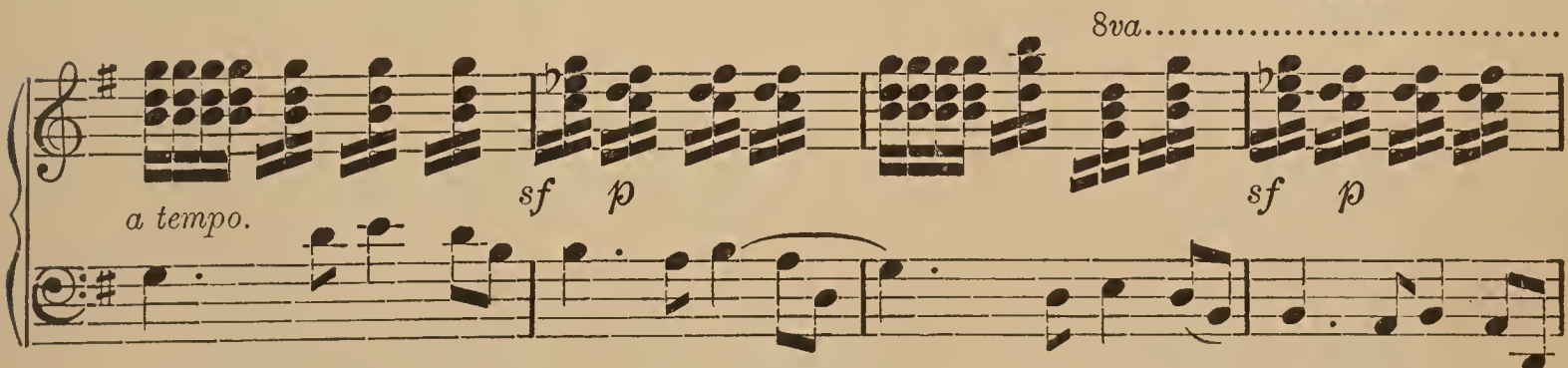
8va.....



8va.....loco.



8va.....



8va.....

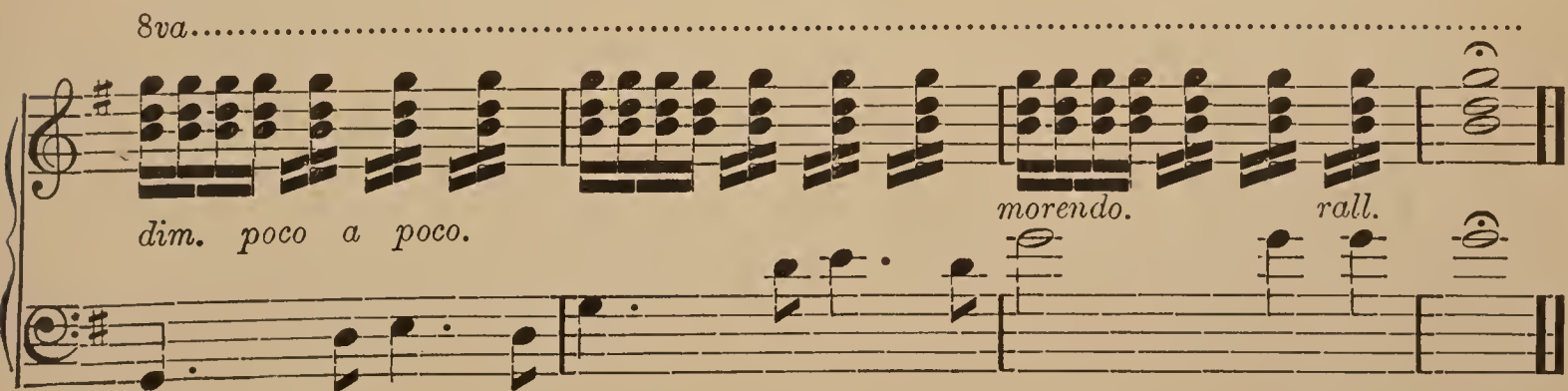




FIG. 264. DEVITALIZING.

FIGURE 86 ENLARGED.—*Explanation:* What is true of one set of muscles is true of all, though not in like degree. The hands should never be allowed to acquire a rude stiffness, nor a flabby weakness; and they require more practice in devitalization than the feet. But the latter must not be neglected, as their stiffness means awkward walking and general movements of a clumsy nature. The principle on which the feet are devitalized is to shake them until they are quite limp and free from a stiff condition. It is possible to do this standing as well as sitting, although some teachers do not think so. Put all the weight on the left leg, raise the right foot, and shake it so rapidly that you cannot see its shape; then reverse and use the other foot in the same way. Now sit and try the right, the left, and both together in turn. The strongest muscles may be made perfectly flexible, yet retain their full strength.

Figure 86.

DEVITALIZING EXERCISE.

SECOND SET.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a 2/4 time signature. It contains four measures, each featuring a half note with a beamed eighth-note triplet. Below the first two measures, the words "Down" and "up" are written. The lower staff is in bass clef and contains four measures of accompaniment, primarily using quarter and eighth notes.

The second system of musical notation continues the exercise with two staves. The upper staff features four measures of beamed eighth-note triplets. The lower staff provides accompaniment with various rhythmic patterns, including quarter and eighth notes.

The third system of musical notation consists of two staves. The upper staff contains five measures, each with a half note and a beamed eighth-note triplet. The lower staff continues the accompaniment with quarter and eighth notes.

The fourth system of musical notation consists of two staves. The upper staff contains five measures of beamed eighth-note triplets. The lower staff provides accompaniment with quarter and eighth notes.

The fifth system of musical notation consists of two staves. The upper staff contains five measures of beamed eighth-note triplets. The lower staff provides accompaniment with quarter and eighth notes, concluding the exercise.



FIG. 265. DEVITALIZING.

FIGURE 87 ENLARGED.—*Explanation:* Start with the arms at the sides, the hands hanging limp. You can take out all vitality by the act of the will, or thinking about it. On count *one* lift the arm until a right angle is formed at the elbow. It now is held up by ordinary vitalization, all energizing being absent. On count *two* command the vitalization to cease from the elbow down; as a result the lower half of the arm will fall to the original position and hang limp. On count *three* lift the arm as in *one*; on *four* devitalize it; and so continue for eight counts. On *nine* use the left arm in the same way, up to *sixteen*. On *seventeen* use both arms alternately; on *twenty-five* use both together; and continue to *thirty-two*. The very thought is sufficient to cut the vitality off at the elbow. In all this practice the fingers and hands must likewise participate as in Figure 187.

Figure 87.

DEVITALIZING EXERCISE.

THIRD SET.

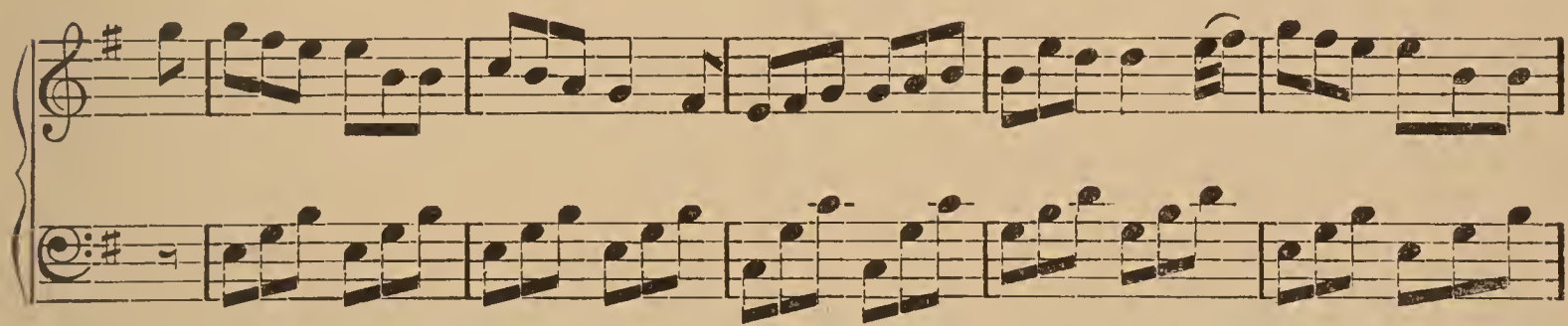




FIG. 266. DEVITALIZING.

FIGURE 88 ENLARGED.—*Explanation:* It will be noticed that Figure 187 applied to the fingers and hand, while Figure 189 applied to the fingers, hands, wrists and forearm. Here we involve all those parts, and add more, carrying the devitality to the elbows, upper arm and shoulder. Lift the arm as high as possible, straight over the line of its support, commencing with either the left or the right, except that the whole class must begin with the same side of the body. The muscles are not energized, for that means to tense them; they are vitalized, by which is meant that they are using ordinary power to do the work assigned them. An act of the will serves to take the vitality out, and the arm falls like a limp rope. Repeat until *eight* is reached; then use the other arm in the same way; then both alternately; then both together.

Figure 88.

DEVITALIZING EXERCISE.

FOURTH SET.





FIG. 267. DEVITALIZING.

FIGURE 89 ENLARGED.—*Explanation:* The languid mood takes the stiffness out of the muscles without lessening their strength, provided it is used in the proper proportion. In childhood all swaying and moving about in lolling standing positions occur at the ankles. Stand, and notice how easy it is to sway right and left, using no muscles whatever except those located at the ankles. Now swing about, without moving the feet, twisting the whole body naturally in so doing. To this add the right and left action of the shoulders, and cause the arms to swing about as though they were limp ropes attached at the upper ends, and had no power of resisting the motion to which they are subjected. This is a form of devitalization that involves the outward lines of support, and is highly beneficial if the movements of all the other figures in this series have been fully practiced.

Figure 89.

DEVITALIZING EXERCISE.

FIFTH SET.

One two three four five six seven eight

The musical score is written for piano and consists of six systems. Each system contains a treble staff and a bass staff. The first system includes fingerings 'One' through 'eight' above the treble staff. The music is in common time (C) and features a variety of chords, including triads and dyads, as well as melodic lines. The second system introduces a key signature change to one flat (B-flat major or D minor). The third system features triplets in both hands. The fourth system continues with various chordal textures. The fifth system includes a key signature change to two sharps (F# major or C# minor). The sixth system concludes the exercise with a final cadence.

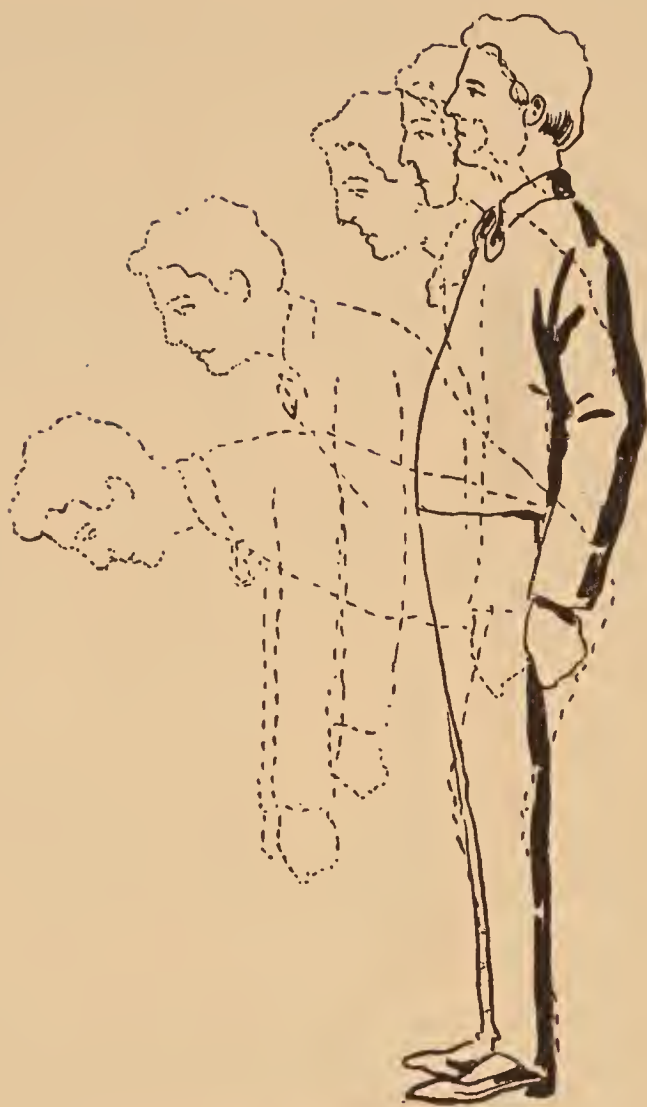


FIG. 268. DEVITALIZING.

FIGURE 90 ENLARGED.—*Explanation:* This is one of the best and most artistic forms of devitalization. It involves the whole body from the head to the knees. Stand firm, the hands at the sides. The body has four main lines of support; at the knees, waist, chest and neck. On count *one* command all vitality of the muscles to leave the neck; the head immediately falls and rolls. On count *two* command all vitality of the muscles to leave the chest; that region at once collapses, as in a tired posture. Carry the command to the waist, and the torso, chest, head and arms all pitch forward. Now, on count *four*, devitalize at the knees, and the body would fall but for the support at the feet. On count *five* vitalize at the knees; on *six*, at the waist; on *seven*, at the chest; on *eight*, at the neck. Continue for thirty-two counts. See that the muscles are thoroughly relaxed at each command.

Figure 90.

DEVITALIZING EXERCISE.

SIXTH SET.

One two three four

The musical score is written for piano in 3/4 time, featuring a treble and bass staff. It consists of eight measures, with the first four measures labeled 'One', 'two', 'three', and 'four'. The notation includes various musical symbols such as notes, rests, and dynamic markings. The score is divided into two systems of four measures each. The first system shows a sequence of chords and single notes, while the second system introduces more complex rhythmic patterns and dynamic markings. The overall structure is designed to be a 'devitalizing exercise' for the sixth set of a series.



FIG. 269. ARTISANS.

FIGURE 91 ENLARGED.—*Explanation:* The term artisans is the polite appellation of men that toil. It is not necessary to do the work of these closing series in order to prepare one for the arduous labors of life; but, as the movements are important for hygienic reasons, and involve considerable pleasure at the same time, they are necessary to this system, no matter by what name they are called. Here we climb the ladder, using “all fours” vertically. On count *one* raise one foot and one hand; on count *two* raise the other foot and the other hand. Commence with either foot, so that all the class use the same side on each count. One way is to begin with the right foot and right hand on count *one*, the left foot and left hand on count *two*, and so on. Another way is to use the right hand and left foot on count *one*, the left hand and right foot on count *two*, and so continue. Do not advance the body. When one hand or foot is up, the other hand or foot will be down.

Figure 91.

THE ARTISANS.

FIRST SET.

Down up down up

The musical score is written for a single melodic line on a treble clef staff and a supporting bass line on a bass clef staff. The time signature is 3/4, and the key signature is one sharp (F#). The score is divided into six systems, each containing two staves. The first system includes dynamic markings: 'Down' with an accent (>) and 'up' with an accent (>). The music is composed of eighth and sixteenth notes, often beamed together, and rests. The piece concludes with a final double bar line and a key signature change to one flat (F) in the last measure of the sixth system.



FIG. 270. ARTISANS.

FIGURE 92 ENLARGED.—*Explanation:* This is the bell-ringer. It is exquisitely beautiful. There are several ways of performing the movement, and the music has much to do with the success of the action, as well as its enjoyment. On count *one* step right oblique forward, raising the hands to grasp the supposed bell-rope, and lifting the left foot close behind the ankle of the right. On count *two* step obliquely backward on the left foot, lift the right in front a few inches, and pull hard down on the rope. On count *three* repeat the combined action of count *one*; *four* is the same as *two*. Allow eight counts for the right side and eight for the left, repeating until *thirty-two* is reached. At the first practice it is well to keep both feet on the floor until the full rhythm of the action has been acquired; then the dainty lifting of the feet adds to the artistic value of the exercise.

Figure 92.

THE ARTISANS.

SECOND SET.

One two three four

The musical score is written for piano and features a melody with four numbered measures. The time signature is 3/4, and the key signature has one flat (B-flat). The melody is written in the treble clef, and the piano accompaniment is in the bass clef. The melody consists of eighth and sixteenth notes, with some measures containing beamed sixteenth notes. The piano accompaniment consists of chords and single notes, with some measures containing beamed sixteenth notes. The score is divided into four systems, each containing a melody line and a piano accompaniment line. The first system is labeled 'One', 'two', and 'three'. The second system is labeled 'four'. The third and fourth systems do not have labels. The score ends with a double bar line and a repeat sign.

Details of Fig.92



Fig.271



Fig.273.



Fig.272.



Fig.274.

The details of the **Bell-ringer** exercise are but four in number; but, owing to their importance, they should be well understood. Very little or very much may be made out of this, the best of the Artisans, as it combines beauty, grace, pleasure and profit as a means of physical training. It may be done smoothly so as to produce no jar of the body, or in a jerky and angular manner so as to destroy all its value. The conservation of vitality or force is necessary even to the skilled laborer; and that man is most tired at night who has been most angular in his work. He who is always in perfect poise in every part of every motion never strains his muscles or loses by unnecessary wrenching the vitality that keeps the engine of life in full activity.

In the Bell-ringers the feet are given a swing forward and backward, the two movements uniting so as to produce one rocking motion of ease and grace. The difference between the plain and the graceful methods is seen by comparing Figures 270 and 271. In the former the step is taken without the swing of the left foot, while in the movement of Figure 271 the right foot has caused the body to advance and the left foot has gone on and passed it in a long swing, all on count *one*. This swing may be reduced so as not to allow the left foot to pass the right leg; but the longer the step, if in poise, and the larger the range of the swinging action, the better will the exercise become.

The pull is down and backward in one large sweep of the arms, while the weight is transferred from the right foot oblique forward to the left foot oblique backward. This combination causes the swing of the body as carried by the feet to coincide with the curved movement of the arms. As the stride forward on the right foot should be large, so the stride backward on the left foot should likewise be large; and as the left foot swung forward when the weight was advanced on the right foot, so the right foot should swing backward when the weight is on the left foot, as is seen in Figure 272. After four full movements on the right side, reverse and repeat to the left side, getting the swing of body and of arms by the aid of feet and hands. Few exercises combine so many opportunities for pleasure and health as this. In order to realize this pleasure it is necessary to fill out the music by timing the action of the body so there will be no wait in any part of the measure; but a smooth evenness that indicates perfect rhythm. This requires careful practice.

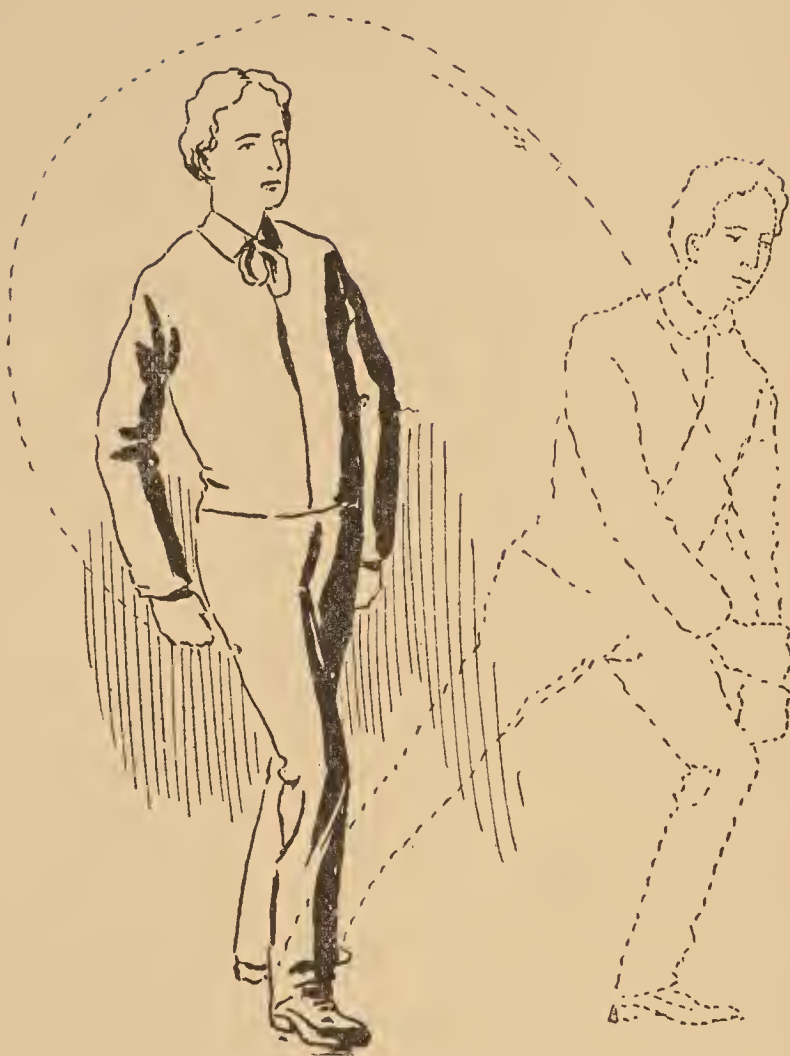


FIG. 275. ARTISANS.

FIGURE 93 ENLARGED.—*Explanation:* This is the anvil action. To begin it, advance the weight to the right foot, the right hand being held slightly back. On count *one* step forward on the left foot advanced as far as possible, and at the same time bring the right fist up and over the head in a large curve, and down on the left fist, which should be placed on the left knee to receive it. This makes a complicated movement for one count. The action may be separated if one desires it, using one count for the advance of the left foot and another for the advance of the right hand; but the music must exactly suit it. When the first combination has been used four times, reverse for four to the other side of the body, then reverse again, and continue for thirty-two counts. The action is very pleasant. It becomes wearying only by giving it a large range.

Figure 93.

THE ARTISANS.

THIRD SET.

One two three four

The musical score is written for piano in G major (one sharp) and common time. It consists of six systems of two staves each. The first system is labeled 'One', the second 'two', the third 'three', and the fourth 'four'. The music features a variety of chords, including triads and dyads, and melodic lines with eighth and sixteenth notes. The final system concludes with a double bar line and repeat signs.



FIG. 276. ARTISANS.

FIGURE 94 ENLARGED.—*Explanation:* Here we are engaged in the act of mowing. It makes no difference whether or not we reproduce the skill of the farmer of the olden days, for young ladies and gentlemen of the city are not presumed to be qualified for field work. On count *one* swing your imaginary scythe to the right backward position, as though in the act of getting ready. On count *two* come forward in a large curving sweep, stooping as you cut the grass, so as to carry the scythe on a line parallel with the ground. It is better to step backward with the right foot on count *one*, and forward with it on count *two*. At the end of eight counts reverse. This should be done very artistically, and requires that the left foot remain in its position for count *nine*, as it will be found ready there at count *eight*; and that the hands be swung to the left oblique backward on the same count *nine*.

Figure 94.

THE ARTISANS.

FOURTH SET.

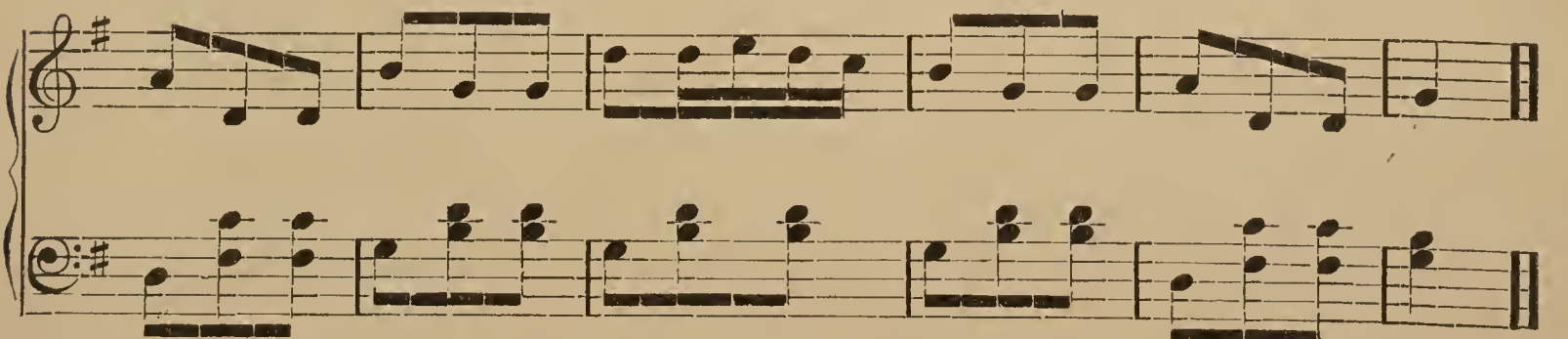
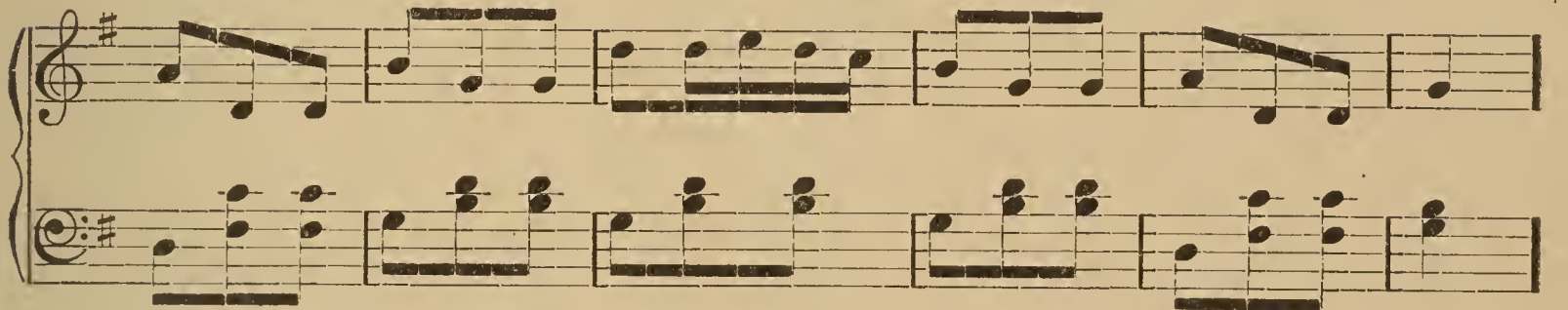
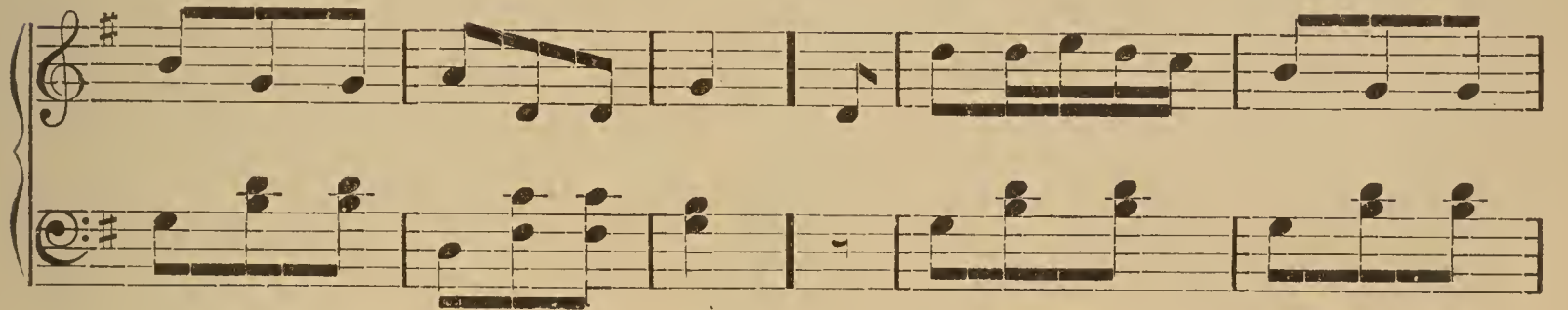
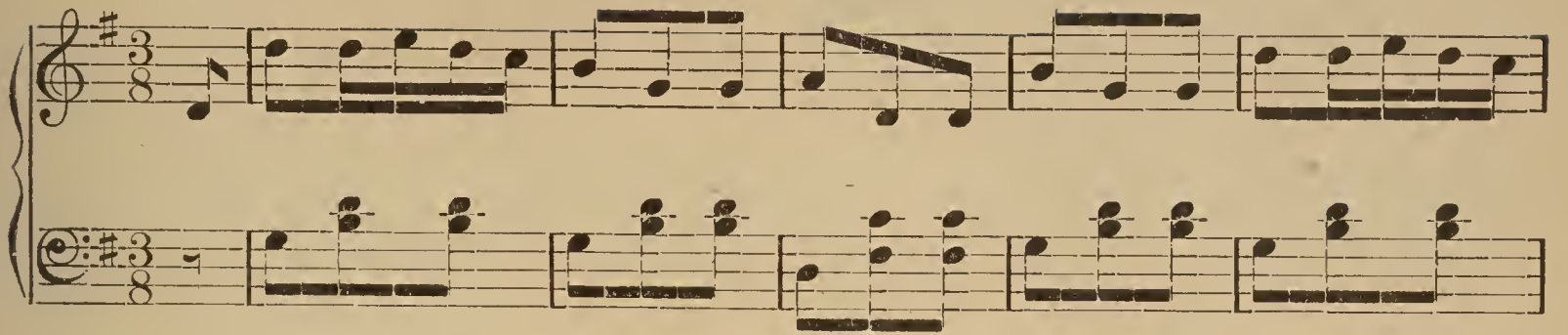




FIG. 277. ARTISANS.

FIGURE 95 ENLARGED.—*Explanation:* The miner is at work, not at the ground, but against a front wall of coal that rises before him. You see we need this kind of action, and choose to direct the work in this way. On count *one* raise the hands above the head or even backward, taking the position of one about to strike. On count *two* deal the blow, but do not strike lower than the height of the head or neck. A study of the feet now enters the practice. First, you can hold the right foot advanced all the time you strike with the right side action; then, after eight counts, reverse; or you can hold the right foot retired on the eight counts struck from the right; or you can retire the right foot on count *one* when the right backward preparation is being made, and advance the right foot with the right blow of the pick on count *two*, and deal with the left side in this way when its turn is reached.

Figure 95.

THE ARTISANS.

FIFTH SET.

One two one two

The first system of musical notation consists of a grand staff with a treble and bass clef. The key signature has two flats (B-flat and E-flat), and the time signature is 3/4. The melody in the treble clef begins with a piano (*p*) dynamic and features four measures with accents marked 'One' and 'two'. The bass clef accompaniment consists of chords and single notes.

The second system continues the piece. The treble clef features a melodic line with a mezzo-forte (*mf*) dynamic marking. The bass clef continues with a steady accompaniment of chords.

The third system shows the continuation of the melody and accompaniment. The treble clef has a melodic line with a repeat sign, and the bass clef has a consistent chordal accompaniment.

The fourth system continues the musical piece. The treble clef melody starts with a piano (*p*) dynamic. The bass clef accompaniment features some rests in the first two measures.

The fifth system continues the piece. The treble clef melody has a forte (*f*) dynamic marking. The bass clef accompaniment is consistent with the previous systems.

The sixth and final system of the piece. It features a mezzo-forte (*mf*) dynamic in the treble clef melody and a forte (*f*) dynamic in the bass clef accompaniment. The system concludes with a double bar line and repeat signs.



FIG. 278. ARTISANS.

FIGURE 96 ENLARGED.—*Explanation:* This is a peculiar as well as an interesting action, and is quite beneficial to one who is able to do it after mastering the exercises that precede. The question arises whether the right hand shall grasp the end of the handle or the middle of the handle. Some claim the former to be right, others believe in the latter method. Most laborers who are right-handed take the end of the handle in the right hand; some who are right-handed reverse this. On count *one* stoop and fill the shovel; on count *two* rise and throw the contents. The place of digging may be directly in front of the feet, and the heap to be made can be placed to the left side, several feet ahead. After eight counts, reverse and use the other side.

Figure 96.

THE ARTISANS.

SIXTH SET.

One two three

four five



FIG. 279. IMITATION.

FIGURE 97 ENLARGED.—*Explanation:* The imitation movements are designed for the same ends as are the “Artisans” referred to under Figure 193. The present action requires a particular class of music to develop it properly, and few airs suit it so well as that which we have selected. Our description might end by saying that the pupil should listen to the music and then skip around the hall or ground, in case there is room. Large classes have performed it without moving from their places; but this is not the most pleasing way of rendering it. The musical counts come rapidly along, and a single step may at first be taken on each, after which let the same step be accompanied by a hop about one inch in height. Thus, on count *one* step and hop on the right foot; on count *two* step and hop on the left foot; and so continue until the music stops. Do not overdo it.

Figure 97.

IMITATION EXERCISE.

FIRST SET.

This musical score is for an imitation exercise in G major, 6/8 time. It consists of six systems, each with a treble and bass staff. The exercise is characterized by a steady eighth-note accompaniment in the bass and a melody in the treble that imitates the bass line. The melody features various intervals, including thirds, fourths, and fifths, and includes some slurs and ties. The piece concludes with a final cadence in the treble staff.

The score is written for piano and is in G major (one sharp) and 6/8 time. It consists of six systems of music, each with a treble and bass staff. The exercise is an imitation exercise, where the treble staff imitates the bass staff. The bass staff provides a steady eighth-note accompaniment, while the treble staff plays a melody that follows the same rhythmic pattern. The exercise is divided into two parts, with the first part ending after the third system and the second part continuing from the fourth system. The piece concludes with a final cadence in the treble staff.



FIG. 280. IMITATION.

FIGURE 98 ENLARGED.—*Explanation:* This exercise is a double imitation, representing the fencer and the militiaman. To be properly performed the position should be held up to the last fraction of a second preceding the note of the music that calls for a change. The fencer must be quick in effecting a movement. This is not a rapid exercise, for there is a quietly held position between the notes that indicate the counts. On the first accent pass from an ordinary standing attitude to that of the fencer, the right arm extended to the side, and the left upraised to balance it. On count *two* make a quick change to that of the militiaman. In the fencing attitude the weight is to be equally supported on both feet, and the knees are slightly bent. In the shooting attitude the feet are to be brought closely together, or else one is to be placed behind the other.

Figure 98.

IMITATION EXERCISE.

SECOND SET.

This musical score is for a piano exercise in G major, 6/8 time, consisting of six systems of two staves each. The exercise is an imitation exercise, where the right hand plays a melody and the left hand imitates it. The melody in the right hand is a simple, ascending and then descending line, while the left hand provides a harmonic accompaniment. The score is written in a clear, legible style with standard musical notation, including treble and bass clefs, a key signature of one sharp (F#), and a time signature of 6/8. The exercise is divided into six systems, each with two staves. The first system starts with a treble clef and a 6/8 time signature. The second system continues the melody. The third system introduces a new melodic line. The fourth system continues the previous line. The fifth system continues the previous line. The sixth system concludes the exercise with a double bar line.



FIG. 281. IMITATION.

FIGURE 99 ENLARGED.—*Explanation:* This is the pleasant occupation of attempting to push over an invisible wall. It is of unusual value in its effect upon the muscles, by reason of the special use made of them. On count *one* extend the arms in front, the hands being almost at right angles with them, and push forward with energy. On count *two* relax all the muscles. This is the easiest method of practicing the exercise. The hands should be at the sides as a preparation, raised on count *one*, and brought again to the sides on count *two*. The feet may remain one in front of the other, the left acting as the pushing foot and the right advanced with the knee bent. On count *two* return the advanced foot to the side of that which was retired. After eight counts reverse to the other side.

Figure 99.

IMITATION EXERCISE.

THIRD SET.

One two one 3 two 3 3

ff

ff

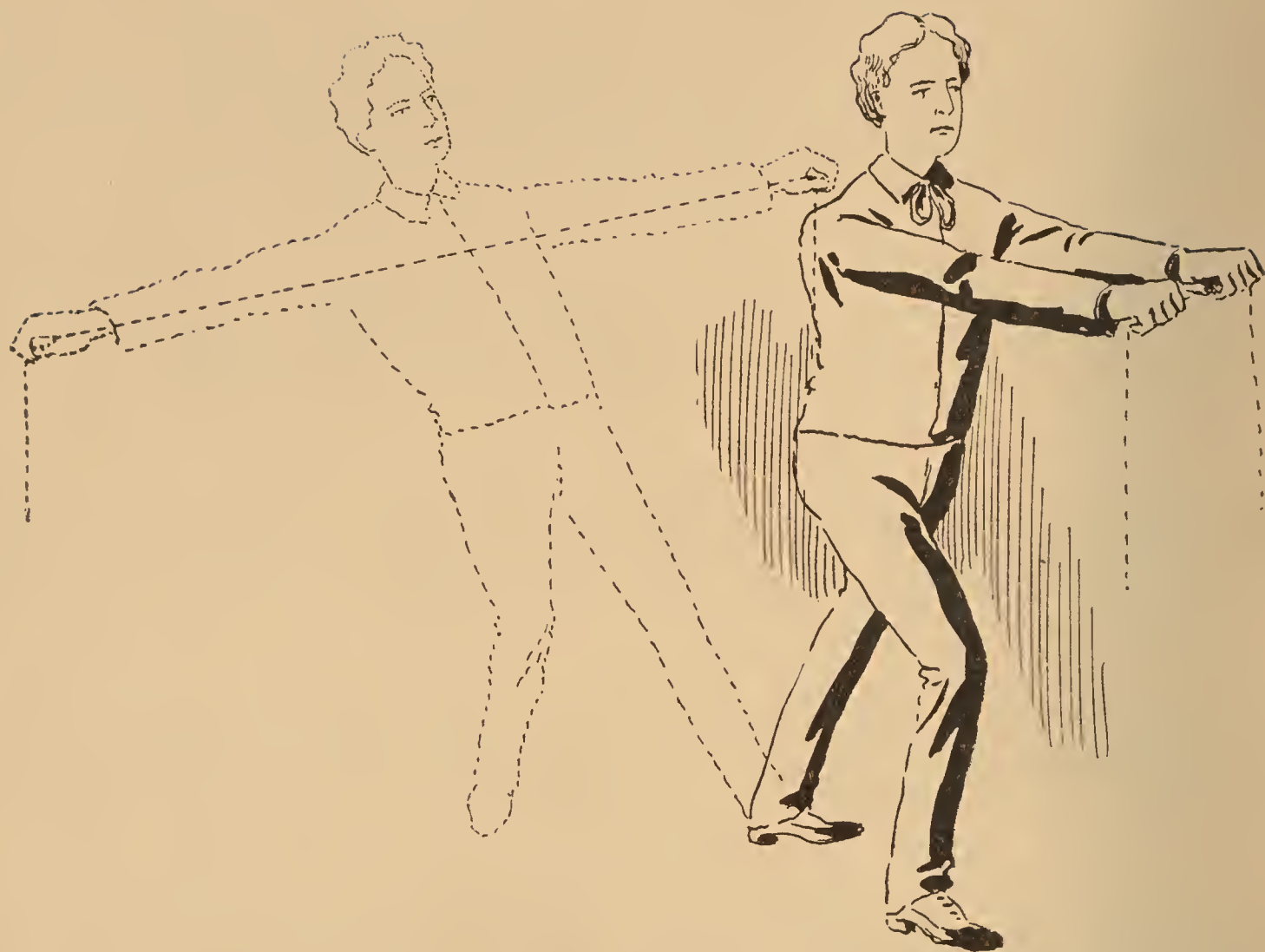


FIG. 282. IMITATION.

FIGURE 100 ENLARGED.—*Explanation:* This is an excellent change from the pushing movement. It involves the stretching action, and must not be confounded with that of pulling. In the latter the direction is backward in a straight line. In stretching, the action is chiefly lateral. On count *one* advance the right foot to the front and grasp the supposed elastic string; on count *two* extend the arms as widely apart as you can while stepping backward on the right foot; on count *three* advance to the first position, bringing the hands together. The main action is on the even-numbered counts—*two, four, six* and *eight*. The arms should be strongly tensed as the outward pulling occurs, as though the elastic cord were almost too strong for the effort. After eight counts, reverse the standing position and continue for eight more, and so on for thirty-two.

Figure 100.

IMITATION EXERCISE.

FOURTH SET.

One two one two

f

one two

p



FIG. 283. IMITATION.

FIGURE 101 ENLARGED.—*Explanation:* In this striking exercise the purpose is to deal a heavy blow to an imaginary bag after the manner of practice in a gymnasium. On count *one* step back; on count *two* advance and strike forward as hard as possible. If the muscles are tensed there will be no strain on the back; otherwise lameness may follow for a few days. It is almost always possible to prevent or to lessen the danger of lameness by making the whole body tense. In striking the blow, if you advance the left foot as the right hand is sent forward, you preserve the law of grace. If you advance the right foot at the time you advance the hand, you add force and distance to the blow. If you simply remain in a fixed position, the effect is neutral.

Figure 101.

IMITATION EXERCISE.

FIFTH SET.

One two one two

The musical score is written for piano in 3/4 time. It consists of six systems of music, each with a treble and bass staff. The first system includes the tempo markings 'One' and 'two' above the first two measures. The music is composed of eighth and sixteenth notes, with various rests and accidentals (sharps and naturals). The piece concludes with a double bar line and repeat signs.



FIG. 284. IMITATION.

FIGURE 102 ENLARGED.—*Explanation:* This is a representation of pulling, and it may be performed in a number of ways. On count *one* pull straight backward; on count *two* relax and take an ordinary standing attitude; on count *three* pull backward again; and so continue for thirty-two counts. The pulling may be done by the stiff arms unbent at the elbow; in which case the body would do the backing and pulling by a step of the foot. It may be done by the arms bending and the body remaining still, or it may be done by the arms bending and the body moving backward, in which case the distance would be greater. All these are important variations of one principle in muscular development. The arms should be energized and the torso be made to exert much strength even to the waist muscles.

Figure 102.

IMITATION EXERCISE.

SIXTH SET.

This musical score is for an imitation exercise in G major, 6/8 time. It consists of five systems, each with a treble and bass staff. The first system begins with a forte (*f*) dynamic marking. The melody in the treble staff is characterized by eighth-note patterns and dotted rhythms. The bass staff provides a harmonic accompaniment with eighth-note chords. The exercise concludes with a final double bar line in the fifth system.

END OF THE SCIENTIFIC COURSE.

In the foregoing department we have presented the full series of enlarged exercises accompanied by music; each following in numerical order, and all constituting the Scientific Course of Ralston Physical Culture, if practiced properly. To be rightly performed, so as to produce real benefit to the body, they should follow in the order as already stated; that is, the first of each series should be practiced before the second one of each series is tried. These are called sets. Thus the first set consists of 1, 7, 13, 19, 25, 31, 37, 43, 49, 55, 61, 67, 73, 79, 85, 91 and 97. All these should be mastered before those of the second set are undertaken; and they should be taken in the order presented by the above figures. This mode of procedure has been amply explained in the pages of description that precede the first presentation of the system in this volume.

It is called the **Scientific Course** as distinguished from the Entertaining Course, because it is not designed primarily to please or amuse so much as to benefit. While work is better for the health than inactivity, play is still better than work, and a scientifically arranged system of exercise is far better than play, for it does not tire, weary or exhaust any part of the body while some other part is totally neglected. There is no play that taxes and relieves the muscles in turn, or in any way; those games or sports that seem to involve the whole body fail to include many sets of muscles, as can be proved by this system if it is employed as a test. Thus, when a well-known all-round athlete asserted that his practice was strengthening to all parts of his body, we showed very quickly that he was mistaken; for quite a large number of the movements of the system which appear on the preceding pages were used to discover what muscles he had neglected, and this was done in the presence of a large class of pupils. Yet our position would be denied by any theorist, since the general activity of the body seems to include all its muscles. We have not time in this place to show the difference between theory and fact. Let it be remembered that the Ralston System demands that the most careful attention be accorded it if perfect health is sought; and it is of the highest importance that the exercises be practiced in sets rather than in series.

THIRD DEPARTMENT.

Entertainment Course

IN

Ralston Physical Culture.

Designed for schools, colleges, and other institutions where the chief end sought is to entertain and delight the pupils while seeking to improve the health.

Also designed for parties, home entertainments and social gatherings where the greatest amount of pleasure is desired without the tediousness of drill or practice, in the effort to rebuild the body on the model of perfect form and health.

The plan followed in the Entertainment Course does not lessen the great value of the exercises, except that the finely balanced movements of the Scientific Course will more quickly restore a person to health than the present arrangement; but no one can perform the movements of this Entertainment Course without finding the health of the body and its every muscle, nerve and organ steadily growing better. More than this, the constant use of the exercises merely as means of pleasure will prevent sickness even among those who count themselves in good health. We recommend that they be practiced three times a week, if the time can be afforded; but once a week, or once a month, will be better than nothing.

The selected exercises are kept in partial balance, as will be observed by a casual glance at them; and the value of this balance, which consists of constant change and relief, will be fully understood when one comes to engage in the practice. All that is said under the descriptions given elsewhere in this volume should be carefully read and understood before attempting to enter into the present course.

The same music, the same movements and the same extended explanations that have already been given will be repeated. It would be folly to vary a standard exercise the value of which is fixed; and to add new music would be still more confusing. Most of the exercises require airs that are very hard to obtain.



FIG. 103. IRON LEGS.

FIGURE 1 ENLARGED.—*Explanation:* The purpose of these extended descriptions of the exercises is to make clear to the student of this course the finest details of action connected with the movements. It was proper that a whole series should appear together on a single page, so that the eye might discern and compare the different phases of the system as far as it applies to each part of the body. Here a whole page is devoted to a single exercise which is seen in enlarged form, and is followed by a clearer explanation than can be crowded into a small space. The music is then placed directly opposite for the greatest convenience to teacher and musician. The Iron Legs series begins with a very gentle exercise. The best way of performing it is to give a swinging motion to the body, dipping back a little as the knees bend forward, and pitching the head slightly forward as the knees are straightened. The pleasure is very great if there is no jerk or jar in the action.

Figure 1.

IRON LEGS.

FIRST SET.

The first system of musical notation consists of two staves. The top staff is in treble clef with a 2/4 time signature, featuring a melody of eighth and sixteenth notes. The bottom staff is in bass clef, providing a harmonic accompaniment with chords and single notes. Pedal markings are present: 'Ped.' at the beginning, followed by an asterisk, then 'Ped.' again, and another asterisk followed by 'Ped.' towards the end of the system.

The second system continues the piece. It features similar melodic and harmonic patterns. A 'ff Ped.' marking is visible in the middle of the system, indicating a fortissimo pedal point. Asterisks are used to mark specific measures throughout the system.

The third system of musical notation shows further development of the musical themes. It includes multiple 'Ped.' markings and asterisks to indicate pedal points and specific measures of interest.

The fourth system continues the musical progression. It features 'Ped.' markings and asterisks, maintaining the rhythmic and harmonic structure established in the previous systems.

The fifth system of musical notation includes a 'ff Ped.' marking, suggesting a strong pedal point. The notation continues with various note values and rests, marked with asterisks.

The sixth and final system of musical notation on this page. It concludes the first set of the piece with 'Ped.' markings and asterisks, ending on a final chord in the bass staff.



FIG. 111. FOOT EXERCISE.

FIGURE 9 ENLARGED.—*Explanation:* The inquiry has often been made by pupils why the use of one foot or leg in exercise will impart more strength than the use of two. The answer should be foreseen by every person who has thought about it. When a body that weighs a hundred pounds is supported on both feet, each foot has but fifty pounds to sustain. When such a body is supported on one foot only, that foot has one hundred pounds to sustain, and the more tax we place on the muscles the more they will grow in strength if they are given a chance to recuperate by rest. For this reason frequent rests are necessary in scientific physical training. In the above exercise the whole weight of the body is not only placed on one foot, but it is made to rest on the forward support. This is done so easily that it will hardly be noticed, if the musical action is followed. On count *one* raise the free foot first and let its upward action or acquired momentum pull the weight off the heel of the strong foot, and thus raise the whole body by the toes of one foot. In doing this the degree of elevation will determine the amount of tax to be placed on the latter.

Figure 9.

FOOT EXERCISE.

THIRD SET.

One two one two

The musical score for Figure 9, Third Set, Foot Exercise, is written in 3/4 time and the key of D major (indicated by two sharps). The score consists of 12 measures. The right hand (treble clef) contains the melody, which begins with a half note D4, followed by a quarter note E4, and then a half note F#4. The melody continues with various intervals and includes slurs and accents. The left hand (bass clef) provides a piano accompaniment, primarily using chords and single notes. The piece concludes with a double bar line and repeat signs. The tempo and dynamics are not explicitly marked, but the fortissimo (f) marking is present in the 10th measure.



FIG. 115. ANKLE EXERCISE.

FIGURE 115 ENLARGED.—*Explanation:* In this movement there is a tendency on the part of pupils to disregard the necessity of maintaining exact positions of the feet, and thus much of the benefits intended may be lost. The best position to begin from is the military attitude; the heels together and the toes pointing obliquely outward. On count *one* cross the right leg in front of the left, placing the toes together and the heels apart in the shape of the letter **V** reversed, or **A** with the bar removed thus, **Λ**. On count *two* put the left leg in front of the right leg by swinging it around, and make a new angle in the same shape, **Λ**. On count *three* swing the right foot around in front of the left, as on count *one*. These swinging steps should coincide exactly with the rhythm of the music to avoid a jerky or jarring action. At no time should the poise be disturbed. The body may be kept over its gravity point by graceful adjustments of the body at each movement.

Figure 13.

ANKLE EXERCISE.

FIRST SET.

One two one two one two

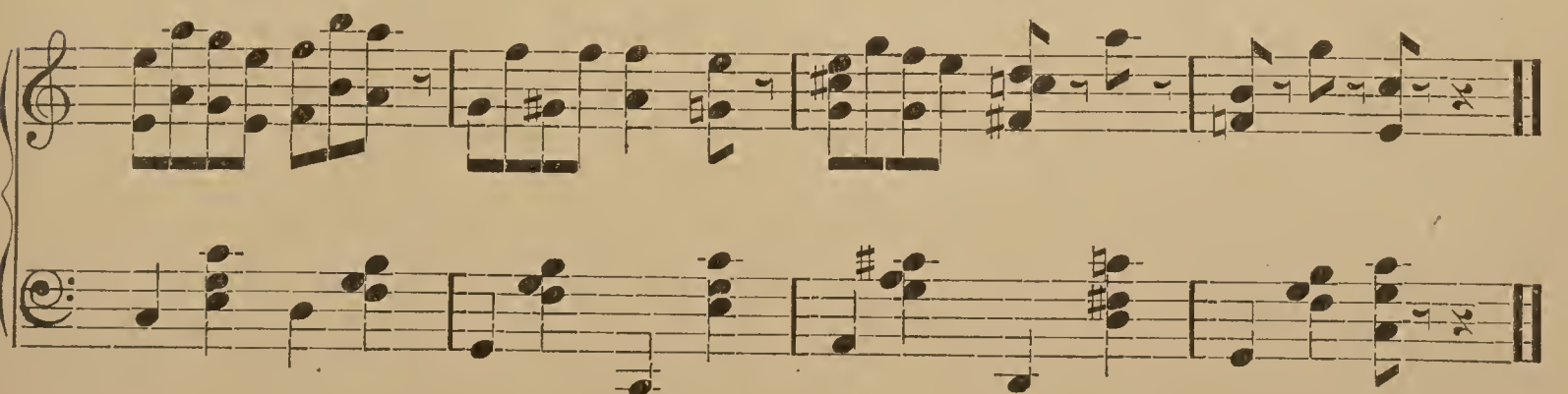
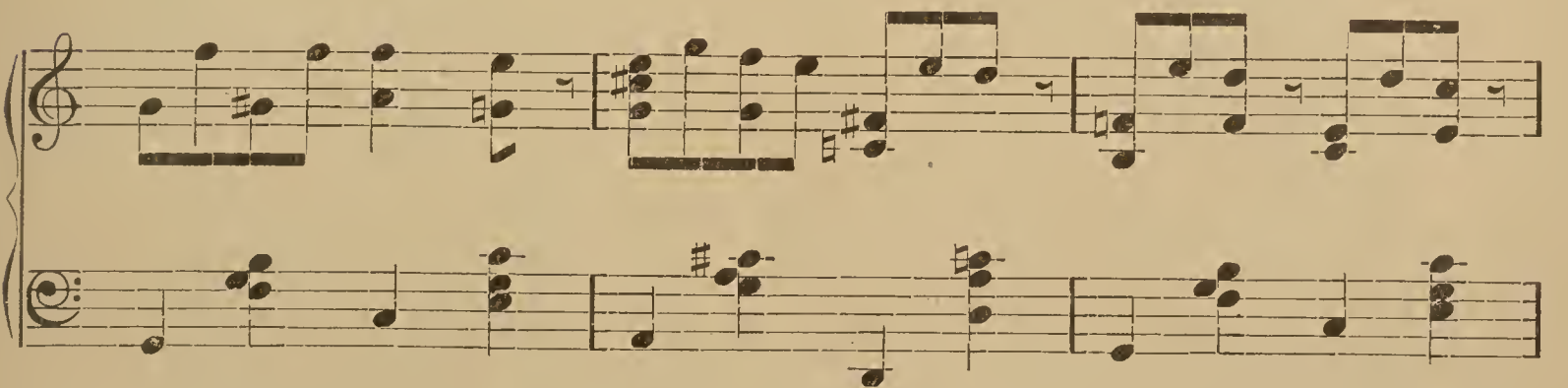
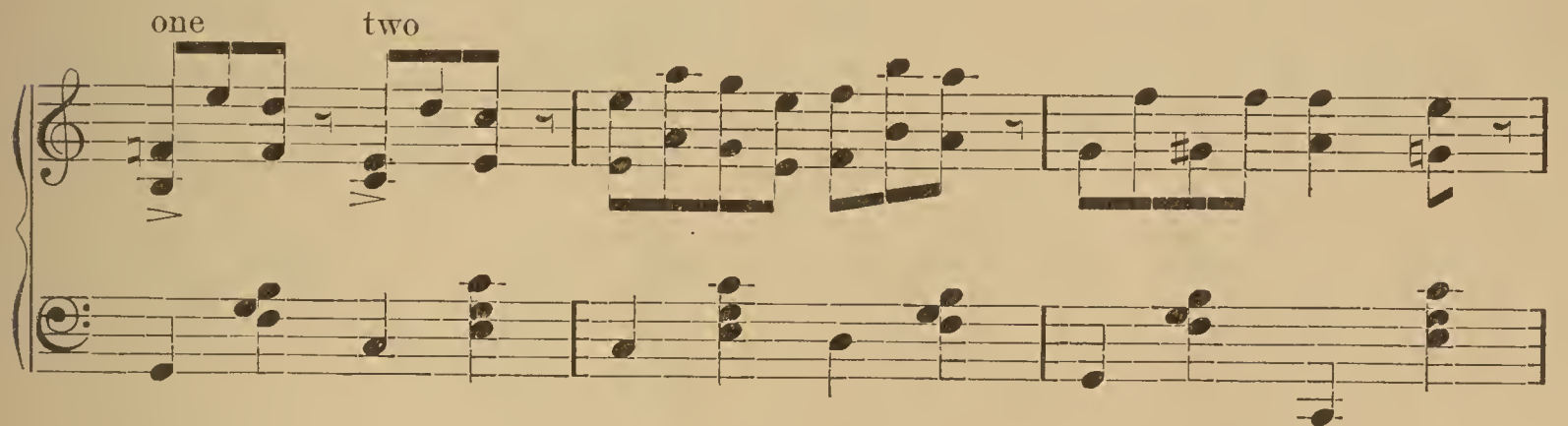
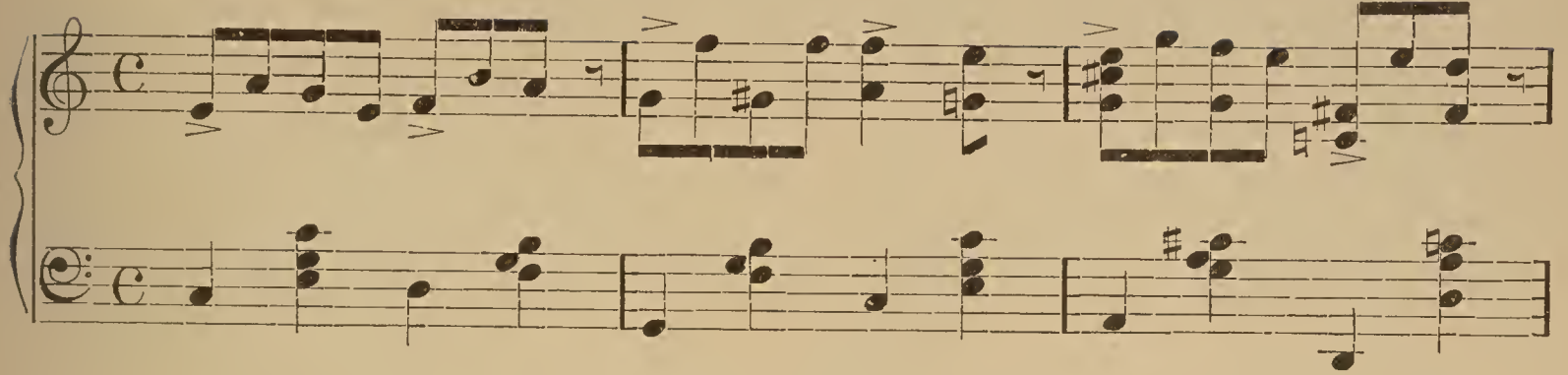




FIG. 143. WAIST EXERCISE.

FIGURE 31 ENLARGED.—*Explanation:* Here we commence the series of movements that are designed to strengthen the muscles of the waist. They are very old, probably four thousand years of age, the first two. The bending at the waist is the most beneficial of exercises, as far as immediate results are concerned in the matter of health. Nothing better can be practiced in cases of stomach weakness, indigestion and inactivity of the system. The above exercise requires the bending to the right on count *one*, and the head and shoulders should be inclined to the right as far as possible. On count *two* the action is to the left. The more the head is lowered the more the waist muscles will be called into effort. This little fall of the head makes a great difference in the tax which is placed upon the lower chest and waist, and this is of decided value. Be sure not to bend at the hip joints.

Figure 31.

WAIST EXERCISE.

FIRST SET.

One two one two one two

one two

fz



FIG. 221. RAPID EXERCISE.

FIGURE 73 ENLARGED.—*Explanation:* Any rapid movement of a muscle sets the blood throbbing quickly through the veins, and the nerves respond by a feeling of life. A quick step, a rapid lifting of the arm, or anything that involves speed, is of the highest value in waking up a sluggish body. Sometimes a headache that is due to a clogging of the system or a stagnation of the blood in the veins of the head, is instantly cured by a quick motion of some part of the body. In the present movement the right hand must be made to pass rapidly around the left, the latter being held still. After eight counts, reverse by keeping the right hand still and causing the left to pass around it. If the speed is good, there will be two or more revolutions on each count. Reverse by changing the direction, also by causing both hands to revolve about each other.

Figure 73.

RAPID EXERCISE.

FIRST SET.

This musical score is for a rapid exercise in B-flat major, 3/4 time. It consists of six systems of piano accompaniment. The first system includes a treble staff with a melody and a bass staff with chords, marked *pp*. The second system is identical to the first. The third system features a more complex treble staff melody with sixteenth-note runs and a bass staff with chords. The fourth system continues with similar treble staff patterns and a bass staff with chords. The fifth system has a treble staff with eighth-note patterns and a bass staff with chords. The sixth system concludes with a treble staff featuring a *sfz* (fortissimo) dynamic and a *p* (piano) dynamic, and a bass staff with a final chord. The score is written in B-flat major (two flats) and 3/4 time.



FIG. 269. ARTISANS.

FIGURE 91 ENLARGED.—*Explanation:* The term artisans is the polite appellation of men that toil. It is not necessary to do the work of these closing series in order to prepare one for the arduous labors of life; but, as the movements are important for hygienic reasons, and involve considerable pleasure at the same time, they are necessary to this system, no matter by what name they are called. Here we climb the ladder, using “all fours” vertically. On count *one* raise one foot and one hand; on count *two* raise the other foot and the other hand. Commence with either foot, so that all the class use the same side on each count. One way is to begin with the right foot and right hand on count *one*, the left foot and left hand on count *two*, and so on. Another way is to use the right hand and left foot on count *one*, the left hand and right foot on count *two*, and so continue. Do not advance the body. When one hand or foot is up, the other hand or foot will be down.

Figure 91.

THE ARTISANS.

FIRST SET.

Down up down up

The musical score consists of six systems, each with a treble and bass staff. The key signature is one sharp (F#) and the time signature is 3/4. The first system includes dynamic markings 'Down', 'up', 'down', and 'up' above the treble staff, with corresponding '>' symbols. The notation includes various musical symbols such as notes, rests, slurs, and dynamic markings like '>'.



FIG. 279. IMITATION.

FIGURE 97 ENLARGED.—*Explanation:* The imitation movements are designed for the same ends as are the “Artisans” referred to under Figure 193. The present action requires a particular class of music to develop it properly, and few airs suit it so well as that which we have selected. Our description might end by saying that the pupil should listen to the music and then skip around the hall or ground, in case there is room. Large classes have performed it without moving from their places; but this is not the most pleasing way of rendering it. The musical counts come rapidly along, and a single step may at first be taken on each, after which let the same step be accompanied by a hop about one inch in height. Thus, on count *one* step and hop on the right foot; on count *two* step and hop on the left foot; and so continue until the music stops. Do not overdo it.

Figure 97.

IMITATION EXERCISE.

FIRST SET.

This musical score is for an imitation exercise in G major, 6/8 time. It consists of six systems, each with a treble and bass staff. The exercise is designed for a single melodic line in the treble staff, which is imitated by the bass staff. The first system begins with a treble staff containing a series of eighth notes and a final quarter note, and a bass staff with corresponding chords. The second system continues the melodic line with some slurs and a final descending eighth-note phrase. The third system features a melodic line with a long slur over the first half and a final quarter note. The fourth system shows a melodic line with a slur over the first half and a final quarter note. The fifth system continues the melodic line with a slur over the first half and a final quarter note. The sixth system concludes the exercise with a melodic line that includes a sharp sign and a final quarter note, and a bass staff with corresponding chords.

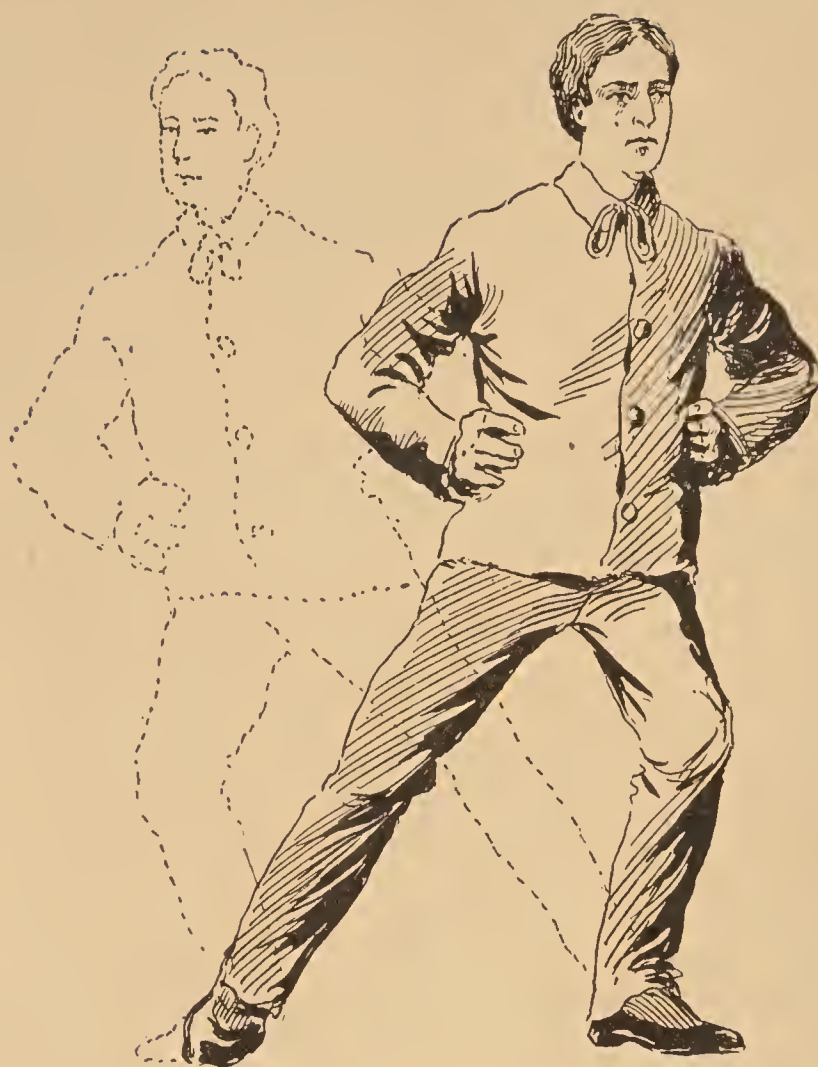


FIG. 104. IRON LEGS.

FIGURE 2 ENLARGED.—*Explanation:* It is supposed that you have gone through all the seventeen exercises of the first set, and are now ready to take up those that are slightly harder in the second set. It is the purpose of this system to wait till the muscles are getting more used to the work and practice before giving them a full test of endurance. There is no good reason why the body should be made stiff and sore uselessly. The first set passed from the gentlest of the leg exercises to those of the feet, then the ankles, and so on up the entire body; all being the easiest to do, yet each having a distinct value in reaching muscles and making them ready for greater tests. We now are at the beginning of the second set; having a very pleasant and important exercise claiming our attention. It is best done by acquiring that smoothness of action that admits of no jar. With the feet apart, say three-quarters of a yard, sway to the right and to the left, bending the knee to admit the slight lowering of the body in each direction, and save yourself from a sudden stopping by giving a spring of the least force, so as to catch the weight and reverse the direction. Herein the beauty of the movement is attained, and the pleasure is increased.

Figure 2.

IRON LEGS.

SECOND SET.

The musical score is written for a piano, featuring a melody in the right hand and a bass line with chords in the left hand. The key signature is one flat (B-flat), and the time signature is 3/4. The score is divided into six systems, each with two staves. The first system begins with a mezzo-forte (*mf*) dynamic marking. The melody consists of eighth and quarter notes, often beamed together, with some measures containing triplets. The bass line is primarily composed of chords, mostly triads and dyads, with occasional single notes. The piece concludes with a double bar line and repeat signs in the final measure of the sixth system.



FIG. 113. FOOT EXERCISE.

FIGURE 11 ENLARGED.—*Explanation:* This is much harder than the preceding movements in this exercise if properly performed. It requires that the weight be kept entirely on the strong foot and none of it placed on the other while the circle is being described. There are many variations possible with this action. In the first place, the music may be fast or slow. Then the circle may be to the right or to the left. The change from one foot to the other should be in counts of eight; thus, make eight circles with the right foot and then eight with the left, then eight with the right, and so on for thirty-two counts, unless the teacher decides that more are necessary in order to sufficiently tax the muscles. The greatest opportunity for variation is in the size of the circle to be described. If it is of small diameter, then the center of gravity is not drawn far from the other foot and the test of strength is not as great. As the circle is enlarged the effect is quickly felt by the strong foot, and the temptation to place part of the weight on the moving foot is increased. The circle should be a graceful and sweeping one, not quick, short and jerky.

Figure 11.

FOOT EXERCISE.

FIFTH SET.

One two three four five

six

ff

8va.....

8va.....

8va.....

ff

The musical score is written for piano and voice. The piano part is in 3/4 time and B-flat major. It consists of a continuous bass line of chords. The vocal line is in the treble clef and includes various melodic patterns, some marked with accents and slurs. The first system is labeled 'One' through 'five'. The second system is labeled 'six'. The third system includes a forte (ff) marking. The fourth, fifth, and sixth systems are marked '8va.....' indicating an octave shift. The sixth system also includes a forte (ff) marking.



FIG. 116. ANKLE EXERCISE.

FIGURE 14 ENLARGED.—*Explanation:* This is called the rocking action of the feet. It is easily performed, but soon shows its good qualities by wearying the muscles of the ankles and imparting great strength to them. It is best to commence all movements alike, if possible, and the pupils should perform the details simultaneously. In this action the toes should carry the weight of the entire body on count *one*, and the heels may be raised slightly or very far up, as the pupils choose or the teacher directs. On count *two* the heels come down and the toes are raised on the same accent of the music. Here is a double action that should be done as one movement and not two. The raising of the toes brings the support upon the heels, where the base is limited; hence the poise is uncertain. To maintain it requires extra strength at the ankles. The rocking may be very gentle or very pronounced, as the pupil decides to make it; but it should be gentle at all times and smoothly performed.

Figure 14.

ANKLE EXERCISE.

SECOND SET.

One two one two

p Dolce.

mf



FIG. 159. CHEST EXERCISE.

FIGURE 41 ENLARGED.—*Explanation:* Here is another of those immensely valuable exercises that are capable of overcoming disease in the most unexpected manner. The seat of life is in the chest. The present movement is the very best of all for increasing the vitality of the lungs, and that means the vigor of the whole body. The music should be specially adapted to the action, as it is of a double nature. On count *one* place the left hand on the chest, and strike the back of that hand with the palm of the right on count *two*. Tapping the chest was always a valuable means of increasing its vitality, but most pupils strike too hard. This enables one to accomplish the desired end, but the blow cannot be too hard when dealt first to the back of the hand. The under hand may be made to travel over the entire chest surface; then go back again, using the right as the under hand.

Figure 41.

CHEST EXERCISE.

FIFTH SET.

One two three four five six

Play fast.

The musical score is written for piano in 6/8 time. It consists of six measures, each with a two-staff system. The first measure is marked 'One' and the last 'six'. The tempo is 'Play fast.' The score includes various musical notations such as notes, rests, and dynamic markings.

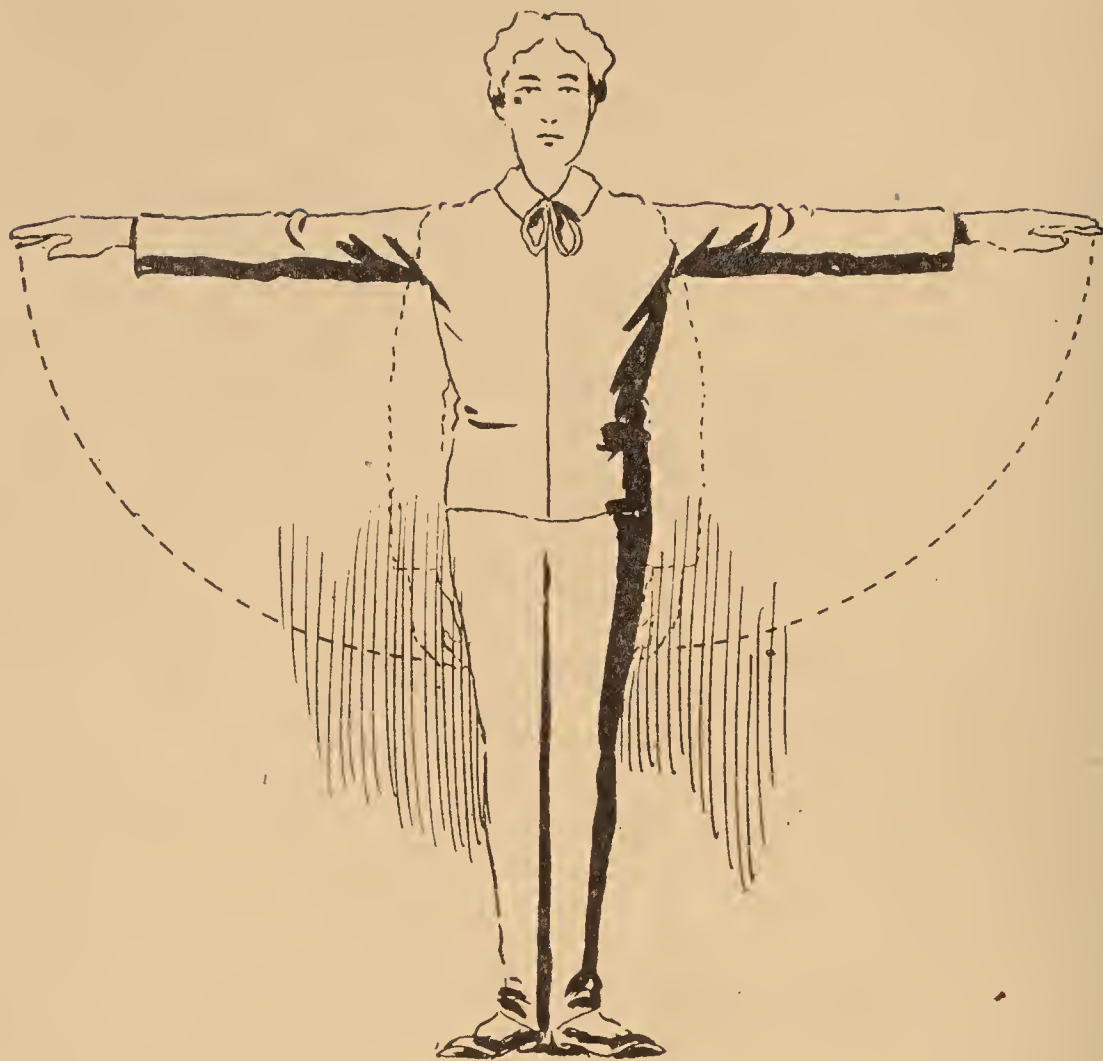


FIG. 171. ARM EXERCISE.

FIGURE 53 ENLARGED.—*Explanation:* In this movement the tax on the arm muscles becomes greater than in any other of the series thus far given. It can be commenced either way, just as the teacher catches the accent, or as the musician develops it. One way is to raise the arms laterally as the attitude of preparation; and bring them down stiff against the sides by an outward swing on count *one*; see that the hands describe arcs of circles, otherwise the whole value of the exercise is lost. On count *two* raise them to the attitude of preparation. The other way is to begin with the hands at the sides and to raise them on count *one* and lower them on count *two*. This depends largely upon the way the music is played. The time should be quite slow until the action is learned, then it may be made faster; but this is to be done gradually. Do not allow the muscles to become limp while the exercise is being performed.

Figure 53.

ARM EXERCISE.

FIFTH SET.

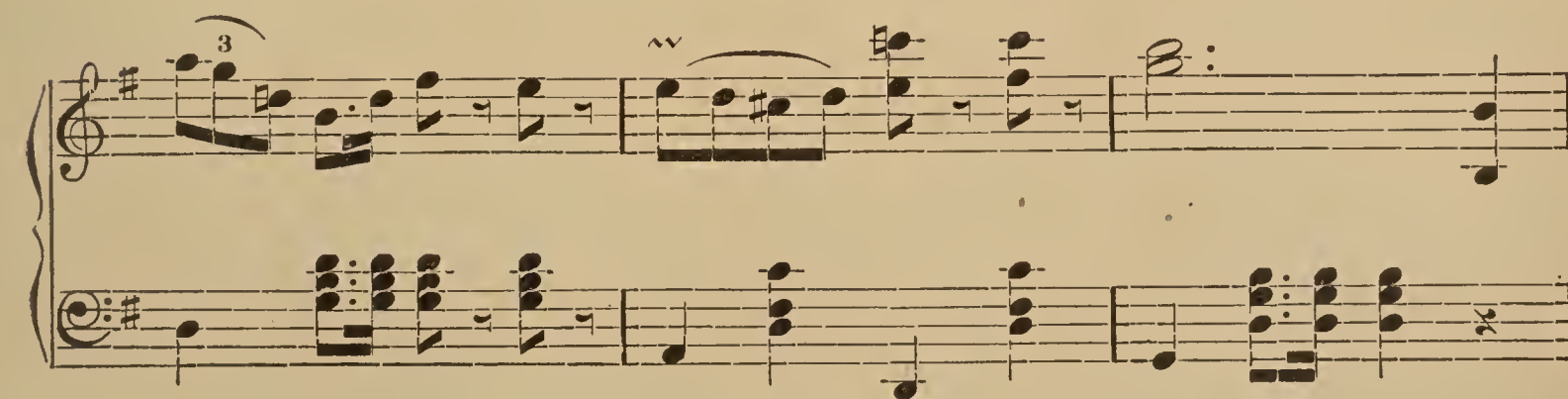
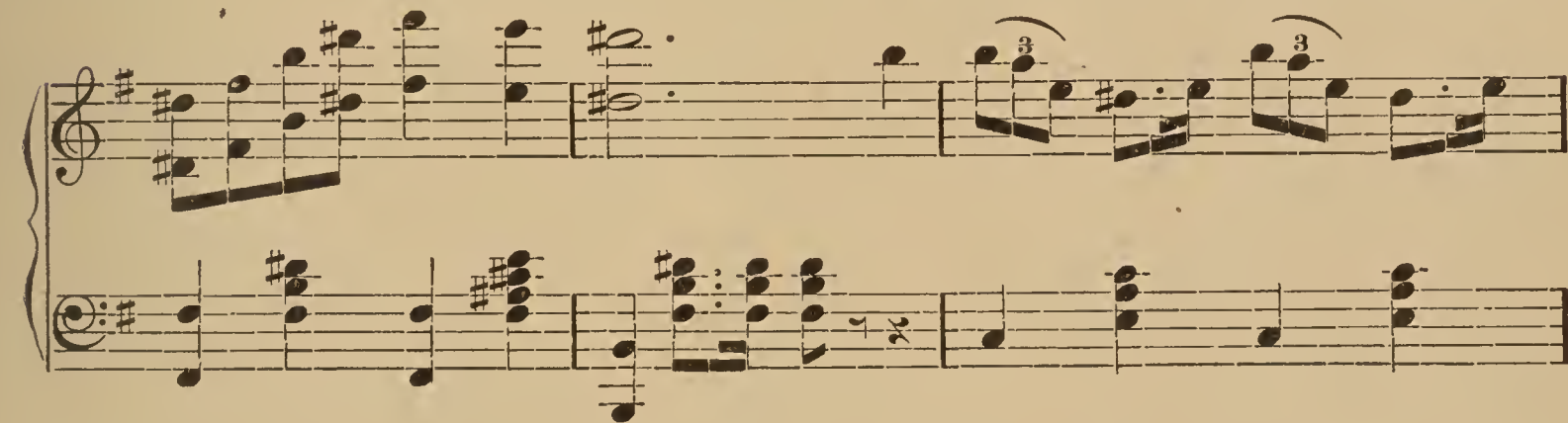




FIG. 222. RAPID EXERCISE.

FIGURE 74 ENLARGED.—*Explanation:* Raise the arms fully to the front, the hands being placed against each other. On counts *one* to *seven* gradually open the arms by separating the hands more and more until the arms are each back of the lateral position; then, on count *eight*, bring the hands together as speedily as possible. The distance traversed by the hands on seven counts is now re-traversed in one only. Yet that one should not be delayed in the slightest degree. It is better to try to make the return in less time than was employed in the seven steps of the opening action. The movement is pleasurable and is always fully enjoyed. It may be done slowly at first by having the music retarded, and speed may be added by playing the air in quicker time.

Figure 74.

RAPID EXERCISE.

SECOND SET.

One two three four five

six seven eight

f

f



FIG. 270. ARTISANS.

FIGURE 92 ENLARGED.—*Explanation:* This is the bell-ringer. It is exquisitely beautiful. There are several ways of performing the movement, and the music has much to do with the success of the action, as well as its enjoyment. On count *one* step right oblique forward, raising the hands to grasp the supposed bell-rope, and lifting the left foot close behind the ankle of the right. On count *two* step obliquely backward on the left foot, lift the right in front a few inches, and pull hard down on the rope. On count *three* repeat the combined action of count *one*; *four* is the same as *two*. Allow eight counts for the right side and eight for the left, repeating until *thirty-two* is reached. At the first practice it is well to keep both feet on the floor until the full rhythm of the action has been acquired; then the dainty lifting of the feet adds to the artistic value of the exercise.

Figure 92.

THE ARTISANS.

SECOND SET.

One two three four

This musical score is for a piece titled "THE ARTISANS. SECOND SET." in 3/4 time. It consists of six systems of music, each with a piano (p) staff and a vocal staff. The key signature has one flat (B-flat). The lyrics "One two three four" are placed above the first four measures of the first system. The piano part features a steady accompaniment with chords and single notes, while the vocal part has a melody with various note values and rests. The score concludes with a double bar line and a repeat sign.



FIG. 117. ANKLE EXERCISE.

FIGURE 15 ENLARGED.—*Explanation:* The present movement is very interesting and beneficial. There are several ways of using it. For mere pleasure we would suggest that the pupil should go to the right on eight counts, then to the left on as many more, bringing the feet back to the place of beginning. On count *one* move the heels to the right; on count *two* move the toes to the right; on count *three* move the heels to the right; on count *four*, the toes to the right; and the *eighth* count will end with the toes to the right. On returning it will be necessary to move the toes to the left on the *ninth* count; the heels to the left on the *tenth*, and so on to the end. In one method the feet may be close together; in another, the length of movement of the toes may be slight; in another, the feet may be separated as much as you choose; in another, the action may be larger, and the distance will be greater from count *one* to count *eight*. Then the pupils may go around the hall, all in one circle, in which case count *one* should move the toes and count *two* the heels.

Figure 15.

ANKLE EXERCISE.

THIRD SET.

This musical score is for an ankle exercise, specifically the third set. It is written for piano in 6/8 time and consists of six systems of staves. The first system includes a vocal line with lyrics 'One two one two one two' and dynamic markings *p*, *f*, and *p*. The subsequent systems feature piano accompaniment with various dynamics including *f*, *p*, *mf*, and *f*. The score includes numerous musical notations such as notes, rests, slurs, and dynamic markings.



FIG. 157. CHEST EXERCISE.

FIGURE 39 ENLARGED.—*Explanation:* This is a particularly important movement, and is designed to strengthen the upper side muscles of the chest. We call it the wing exercise in class. There are many interesting variations which may be considered. On count *one* raise the right elbow; on count *two* lower it and continue for eight; on count *nine* raise the left elbow; on *ten* lower it; and continue for eight; on count *seventeen* raise the right elbow; on *eighteen* raise the left and lower the right; on *nineteen* raise the right and lower the left and continue for eight; on *twenty-five* raise both, then lower them on the next count, and so finish. Occasionally perform the full exercise with the lungs filled with air and the breath held, always stopping as soon as you become dizzy.

Figure 39.

CHEST EXERCISE.

THIRD SET.

Animato.

The musical score for Figure 39, Chest Exercise, Third Set, is written in 2/4 time and the key of B-flat major. It consists of six systems, each with a piano (left) staff and a treble (right) staff. The tempo is marked *Animato.* and the dynamics include *p* (piano) and accents (*>*). The score is as follows:

- System 1:** Treble staff begins with a piano (*p*) dynamic. Both staves feature eighth-note patterns with accents.
- System 2:** Continues the eighth-note patterns with accents.
- System 3:** Treble staff features a piano (*p*) dynamic. Both staves continue with eighth-note patterns.
- System 4:** Continues the eighth-note patterns with accents.
- System 5:** Continues the eighth-note patterns with accents.
- System 6:** Continues the eighth-note patterns with accents.



FIG. 163. SHOULDER EXERCISE.

FIGURE 45 ENLARGED.—*Explanation:* Now comes a very hard movement. It must be remembered that each exercise in the Ralston System has some definite purpose; not merely the general end of producing the best of health; but a specific design with relation to the development of a certain set of muscles. The action of Figure 45 is the best known for reaching the muscles of the back behind and at the shoulders. To commence it let the arms hang at the sides at full length. On count *one* raise the arms in such a way as to produce right angles at the elbows, the hands being elevated; on count *two* lower the forearms only, still preserving the right-angled shape. This is done by turning the forearms over, using the muscles at the shoulders for the change. The severity of the exercise is surprising, but it soon makes a person thick-set and solid at the shoulders and upper back.

Figure 45.

SHOULDER EXERCISE.

THIRD SET.

One two three four

f

ff



FIG. 169. ARM EXERCISE.

FIGURE 51 ENLARGED.—*Explanation:* This is the third of the arm movements. It is much more taxing than the other two that precede it in this series, although not as quick to weary the muscles. It can be done with the open hands at first, but the clinched fists give the arms greater vigor. It is of the utmost importance that the muscles be firmly tensed all the while. On count *one* swing the stiff arms from a lateral to a front position; but each arm must stop suddenly in front of the shoulder, and should not touch the other arm. When the sudden stop is made, it should be solid so as to keep the fists as far apart as the shoulders are. It is this power of checking a quick, strong movement that gives strength to the muscles. On count *two* move the stiff arms to a lateral position and stop as suddenly. Continue for thirty-two counts.

Figure 51.

ARM EXERCISE.

THIRD SET.

One two one two

f

f

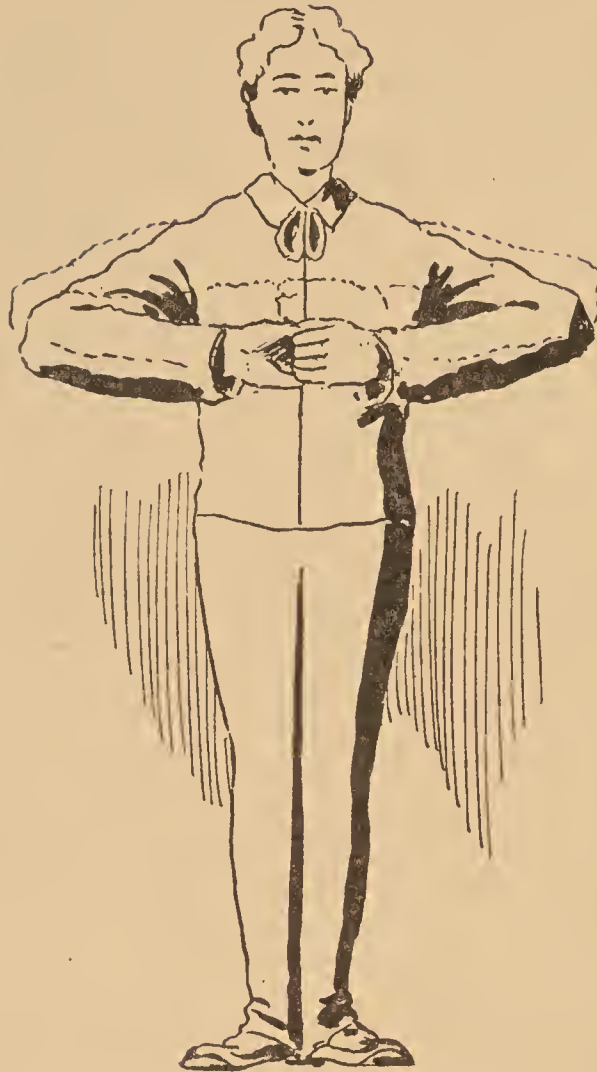


FIG. 175. HAND EXERCISE.

FIGURE 57 ENLARGED.—*Explanation:* The movements in the hand series now grow more severe and more important. Figure 159 combines the arm muscles largely with those of the hand, but only to aid the latter by a new use, one that is rarely met with in exercise. The fingers should be hooked together; and, through all the practice, the elbows must seek to break the hold of the fingers by a strong and continued outward pulling. It is a good exercise for the arm, but a far better one for the hands. Make the pulling as strong as you can. On count *one* bring the hands to the chest; on count *two* extend them forward as much as the length of the arms will allow. You will then see the peculiar power of the exercise. Do not forget to keep up the constant lateral effort of the elbows to pull the hands apart. Go to all parts of the chest on the odd numbered counts.

Figure 57.

HAND EXERCISE.

THIRD SET.

One two one two

f

p

3

This musical score is for a hand exercise, specifically the third set. It is written for piano and consists of six systems of two staves each. The key signature has one sharp (F#), and the time signature is 6/8. The first system includes the instruction 'One two one two' above the treble staff, with accents (>) over the first and third notes of each pair. The first staff of the first system begins with a forte (*f*) dynamic. The second system features a triplet of eighth notes in the treble staff, marked with a '3' and a slur. The third system includes a piano (*p*) dynamic marking. The fourth system shows a crescendo hairpin. The fifth system shows a decrescendo hairpin. The sixth system concludes the exercise with a final double bar line.

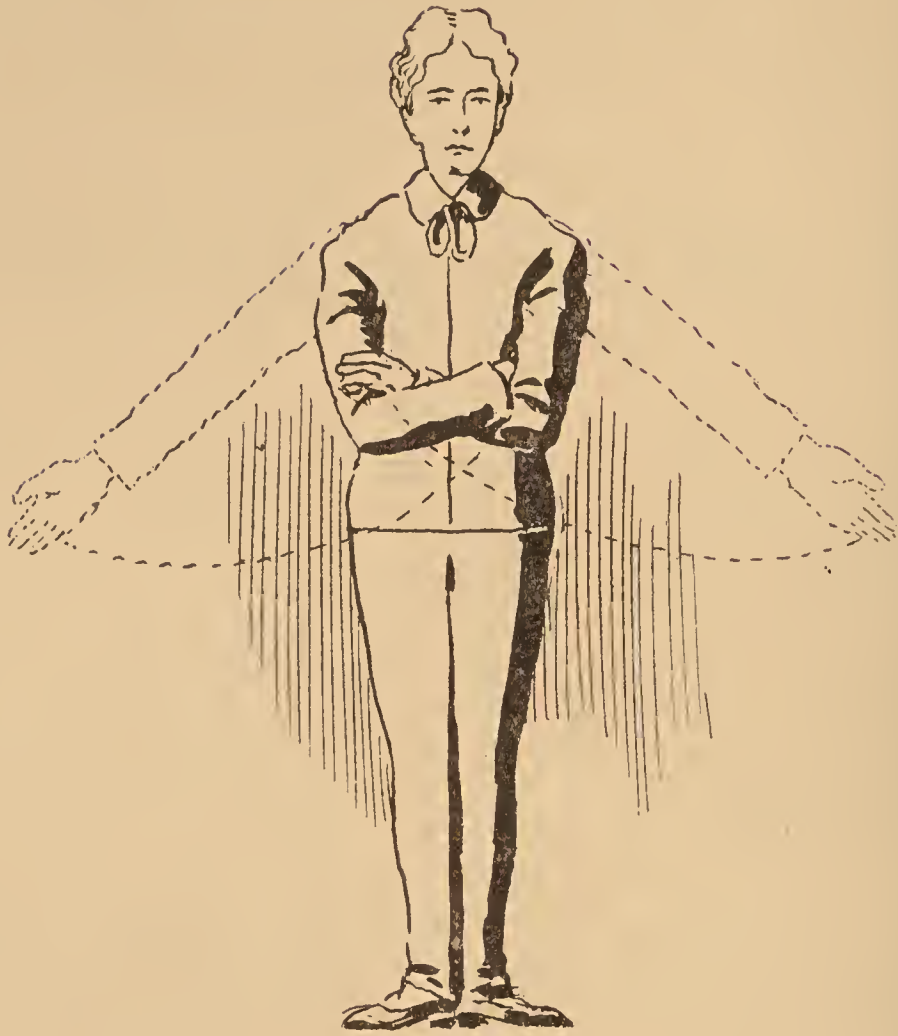


FIG. 223. RAPID EXERCISE.

FIGURE 75 ENLARGED.—*Explanation:* Experience in teaching this exercise indicates that the action should not be given at first in double form, or with two movements to one count, as is suggested in Figure 75. On count *one* throw the arms out to the sides, the hands being on a line with the hips. On count *two* throw them about the lower chest, crossing them in so doing. When this has been done for thirty-two counts, the double movement may be tried. On count *one* throw the arms out and then in and about the chest; on count *two* throw them out and in likewise; and so on for sixteen counts. This requires much speed, and is very exhilarating and invigorating if the breath be held part of the time. There is additional advantage in maintaining a fully extended chest during the whole exercise.

Figure 75.

RAPID EXERCISE.

THIRD SET.

One two one two

fz *p*

fz *p*



FIG. 281. IMITATION.

FIGURE 99 ENLARGED.—*Explanation:* This is the pleasant occupation of attempting to push over an invisible wall. It is of unusual value in its effect upon the muscles, by reason of the special use made of them. On count *one* extend the arms in front, the hands being almost at right angles with them, and push forward with energy. On count *two* relax all the muscles. This is the easiest method of practicing the exercise. The hands should be at the sides as a preparation, raised on count *one*, and brought again to the sides on count *two*. The feet may remain one in front of the other, the left acting as the pushing foot and the right advanced with the knee bent. On count *two* return the advanced foot to the side of that which was retired. After eight counts reverse to the other side.

Figure 99.

IMITATION EXERCISE.

THIRD SET.

The musical score is titled "Figure 99. THIRD SET. IMITATION EXERCISE." and is written for piano in G major (one sharp) and common time (C). It consists of six systems, each with a treble and bass staff joined by a brace. The notation includes various musical symbols: treble and bass clefs, a key signature of one sharp (F#), a common time signature (C), and notes of various durations (quarter, eighth, and sixteenth notes). There are also rests, slurs, and dynamic markings, including "ff" (fortissimo) in the third and sixth systems. Fingerings are indicated by numbers 1, 2, and 3 above notes. The score is divided into measures by vertical bar lines. The first system includes the words "One", "two", "one", and "two" above the first four measures, with slurs indicating the phrasing. The second system features a slur over the first two measures of the bass staff. The third system has a "ff" marking in the middle of the bass staff. The fourth system has a slur over the first two measures of the bass staff. The fifth system has a slur over the first two measures of the bass staff. The sixth system has a "ff" marking in the middle of the bass staff. The score ends with a double bar line in the final measure of the sixth system.



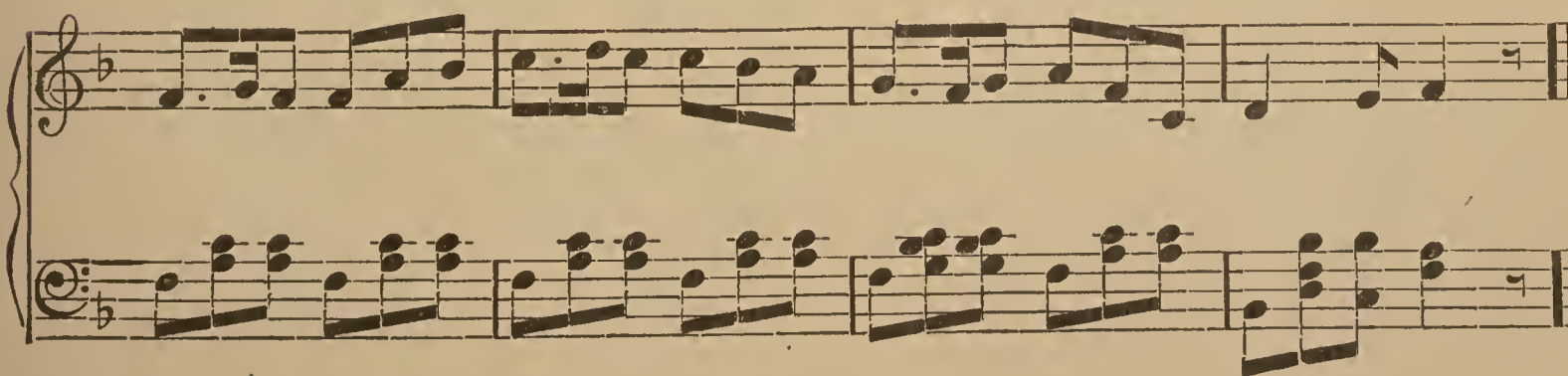
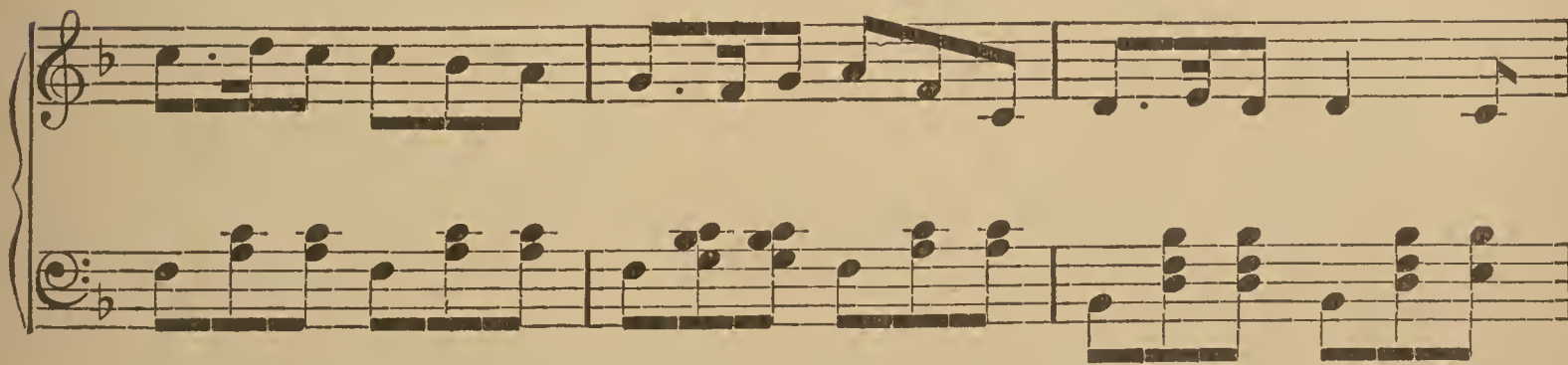
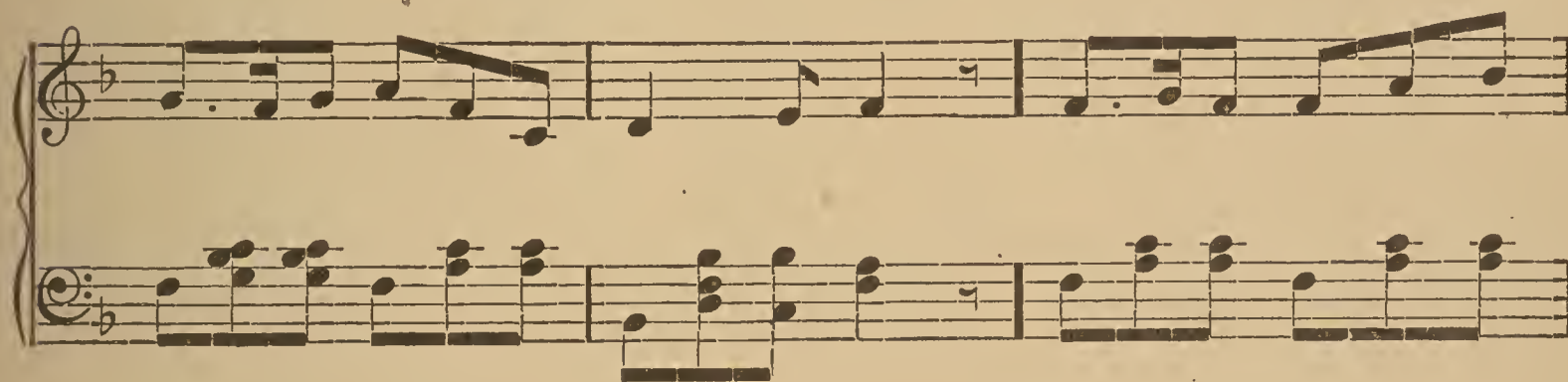
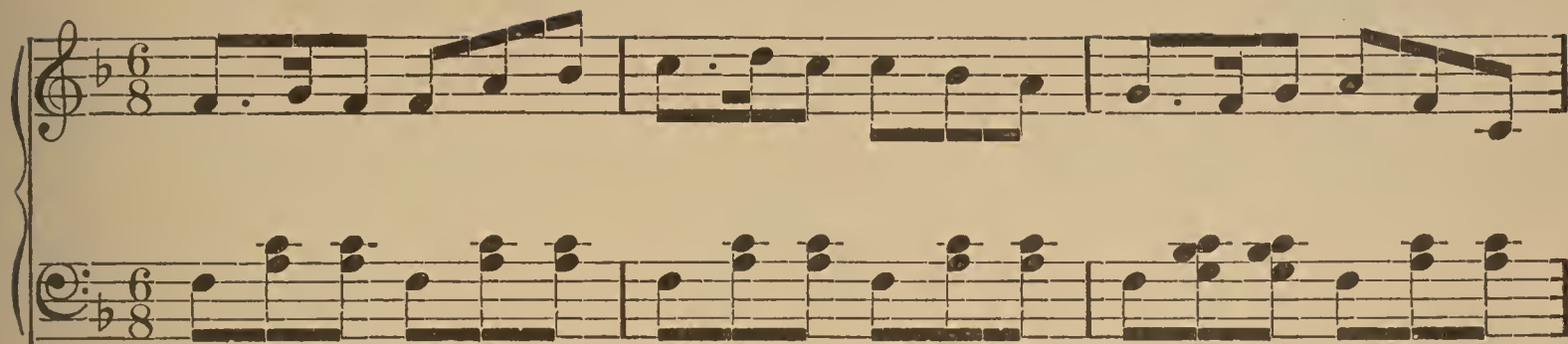
FIG. 118. ANKLE EXERCISE.

FIGURE 16 ENLARGED.—*Explanation:* This is a striking movement. To begin it place the left foot in front of the right, so that the toes of the latter will cross the heel to the left of the left foot. On count *one* the ankle or lower half of the right leg will strike the left leg from behind. On count *two* the right leg will rise on the toes of its foot, using the latter for leverage, and pry the left foot forward several inches. On count *three* the blow will be repeated, and on count *four* it will be followed by the prying action. So continue for eight counts. Then, on count *nine*, let the left foot strike the right a blow; on count *ten* the left foot will pry the right backward; on count *eleven* it will strike another blow; and so on until the starting position has been reached. Now comes an important change. On count *seventeen* the left foot is to swing around behind the right and strike it a forward blow; then the next count will pry the right foot forward, and the same movements will be repeated until the thirty-second count has been reached.

Figure 16.

ANKLE EXERCISE.

FOURTH SET.



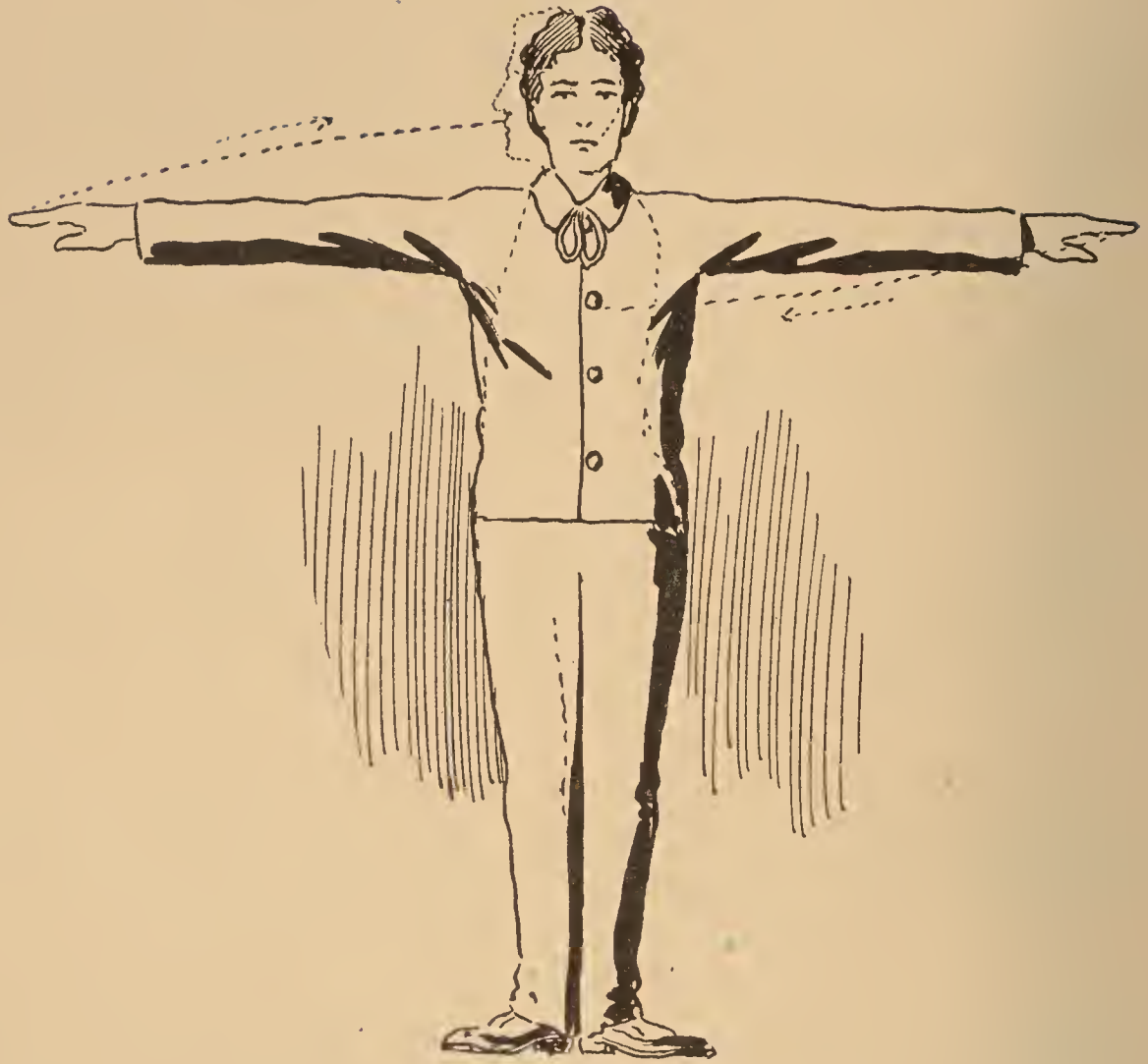


FIG. 152. WAIST EXERCISE.

FIGURE 34 ENLARGED.—*Explanation:* This is a very interesting as well as beneficial action, provided all the requirements are strictly observed. The heels should be together, toes out; the calves of the legs should touch, and be held firmly against each other; there must be no twisting of the lower half of the body, for the tax would then be removed entirely from the waist and placed at the ankles without benefit to them. Imagine that the legs are pinioned together and held in a vice, so they cannot move. On count *one* swing the extended arms around to the right. On count *two* they should swing to the left. Keep the arms well back so as to make them as one long pole, and do not lower them from a position parallel with the floor. See that the waist gets all the tax. A pleasant way of performing the exercise is to commence with short movements to the right and left, and gradually increase their extent.

Figure 34.

WAIST EXERCISE.

FOURTH SET.

One two three

four five six



FIG. 158. CHEST EXERCISE.

FIGURE 40 ENLARGED.—*Explanation:* This excellent movement is known by our classes as the Perpendicular Drill, and is one of the most effective ever invented. Nothing like it was ever known until it was used by the Ralston System, for which it was specially prepared. It is as different from the calisthenic movement, which it seems to resemble, as day is from night. This action requires that the hand be clinched, energized and kept under the arm. On count *one* the fist is to be brought up so as to strike the under part of the arm at the arm-pit, not in front but under. This is very difficult. On count *two* throw the fist downward in a straight line; continue for eight. On *nine* raise the left fist under the left arm, striking hard; then lower it on *ten* and continue; on *seventeen* raise the right fist; on *eighteen* raise the left and lower the right; on *twenty-four* raise both, and continue to *thirty-two*.

Figure 40.

CHEST EXERCISE.

FOURTH SET.

One two one two



FIG. 164. SHOULDER EXERCISE.

FIGURE 46 ENLARGED.—*Explanation:* The tasks grow harder as we proceed. The above exercise will eat up any surplus fat at the shoulders and upper parts of the torso; yet will add flesh where that is lacking. You know that fat is not flesh; it is not the result of nutrition but of stagnation, and should be thrown off when over-accumulated. On the other hand, flesh is the result of nutrition, and is really nutrition in itself. Thus the same exercise may reduce the weight of one person by eliminating the fat, and may increase the weight of another by adding flesh. In the above movement raise the hands over the head as high as possible, with the fists clinched. On count *one* bring them down in a wide, sweeping semi-circle, striking the sides of the hips; on count *two* return them to the high altitude, striking the fists together over the top of the head.

Figure 46.

SHOULDER EXERCISE.

FOURTH SET.

One two one two one two one two

The musical score is written for piano in common time (C). It consists of six systems, each with a treble and bass staff. The first system includes the rhythmic count 'One two one two one two one two' above the treble staff. The melody in the treble staff features eighth and sixteenth notes, often beamed together, with accents (>) and slurs. The bass staff provides harmonic support with chords and single notes. The second system begins with a whole rest in the treble staff. The third system features a melodic phrase in the treble staff that concludes with a double bar line and repeat dots. The fourth system continues the melodic pattern. The fifth system also begins with a whole rest in the treble staff. The sixth system concludes the exercise with a final melodic phrase in the treble staff and a double bar line with repeat dots.



FIG. 212. WHOLE BODY EXERCISE.

FIGURE 72 ENLARGED.—*Explanation:* This is called the Turkish Salute. It is the acme of difficulty as a whole body exercise, and few persons do it well. It may be commenced from the military position as well as from a fixed attitude if a person is quick and flexible in the muscles. In such case the following details must all be performed as count *one*: Extend both hands at the sides and commence to move them backward in such a way that, when back, the palms will face toward the floor; place the right knee behind the left knee, so as to brace the support by the close position of the legs; bend the torso and neck as in bowing. On count *two* the torso should descend fully eight or ten inches at the shoulders; on *three*, as much more; and on *four* the back should be level. The next four counts will serve to bring the body gradually up to an erect attitude. The difficulty of the exercise is in the lack of a strong bracing of the legs. The right knee should be held hard against the left at the back of the latter. After the eight counts, let the action be reversed by placing the left knee behind the right, and so on.

Figure 72.

WHOLE BODY EXERCISE.

SIXTH SET.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 2/4. It contains six measures of music, with the first measure starting on a whole note and the subsequent measures featuring eighth and sixteenth notes. A dynamic marking of *p* (piano) is placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing six measures of music, primarily consisting of eighth and sixteenth notes. Brackets are used to group measures across both staves.

The second system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 2/4. It contains six measures of music, with a dynamic marking of *p* (piano) placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing six measures of music, primarily consisting of eighth and sixteenth notes. Brackets are used to group measures across both staves.

The third system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 2/4. It contains six measures of music, with a dynamic marking of *p* (piano) placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing six measures of music, primarily consisting of eighth and sixteenth notes. Brackets are used to group measures across both staves.

The fourth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 2/4. It contains six measures of music, with a dynamic marking of *p* (piano) placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing six measures of music, primarily consisting of eighth and sixteenth notes. Brackets are used to group measures across both staves.

The fifth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a time signature of 2/4. It contains six measures of music, with a dynamic marking of *p* (piano) placed below the first measure. The lower staff is in bass clef with the same key signature and time signature, containing six measures of music, primarily consisting of eighth and sixteenth notes. Brackets are used to group measures across both staves.



FIG. 276. ARTISANS.

FIGURE 94 ENLARGED.—*Explanation:* Here we are engaged in the act of mowing. It makes no difference whether or not we reproduce the skill of the farmer of the olden days, for young ladies and gentlemen of the city are not presumed to be qualified for field work. On count *one* swing your imaginary scythe to the right backward position, as though in the act of getting ready. On count *two* come forward in a large curving sweep, stooping as you cut the grass, so as to carry the scythe on a line parallel with the ground. It is better to step backward with the right foot on count *one*, and forward with it on count *two*. At the end of eight counts reverse. This should be done very artistically, and requires that the left foot remain in its position for count *nine*, as it will be found ready there at count *eight*; and that the hands be swung to the left oblique backward on the same count *nine*.

Figure 94.

THE ARTISANS.

FOURTH SET.

This musical score is for a piece titled "THE ARTISANS. FOURTH SET." It is written in 3/8 time and the key of D major, indicated by a single sharp (F#) on the treble clef. The score consists of six systems, each with a treble and bass staff joined by a brace. The melody in the treble staff is composed of eighth and sixteenth notes, often beamed together. The bass staff provides a harmonic accompaniment using chords of eighth and sixteenth notes. The piece concludes with a double bar line at the end of the sixth system.

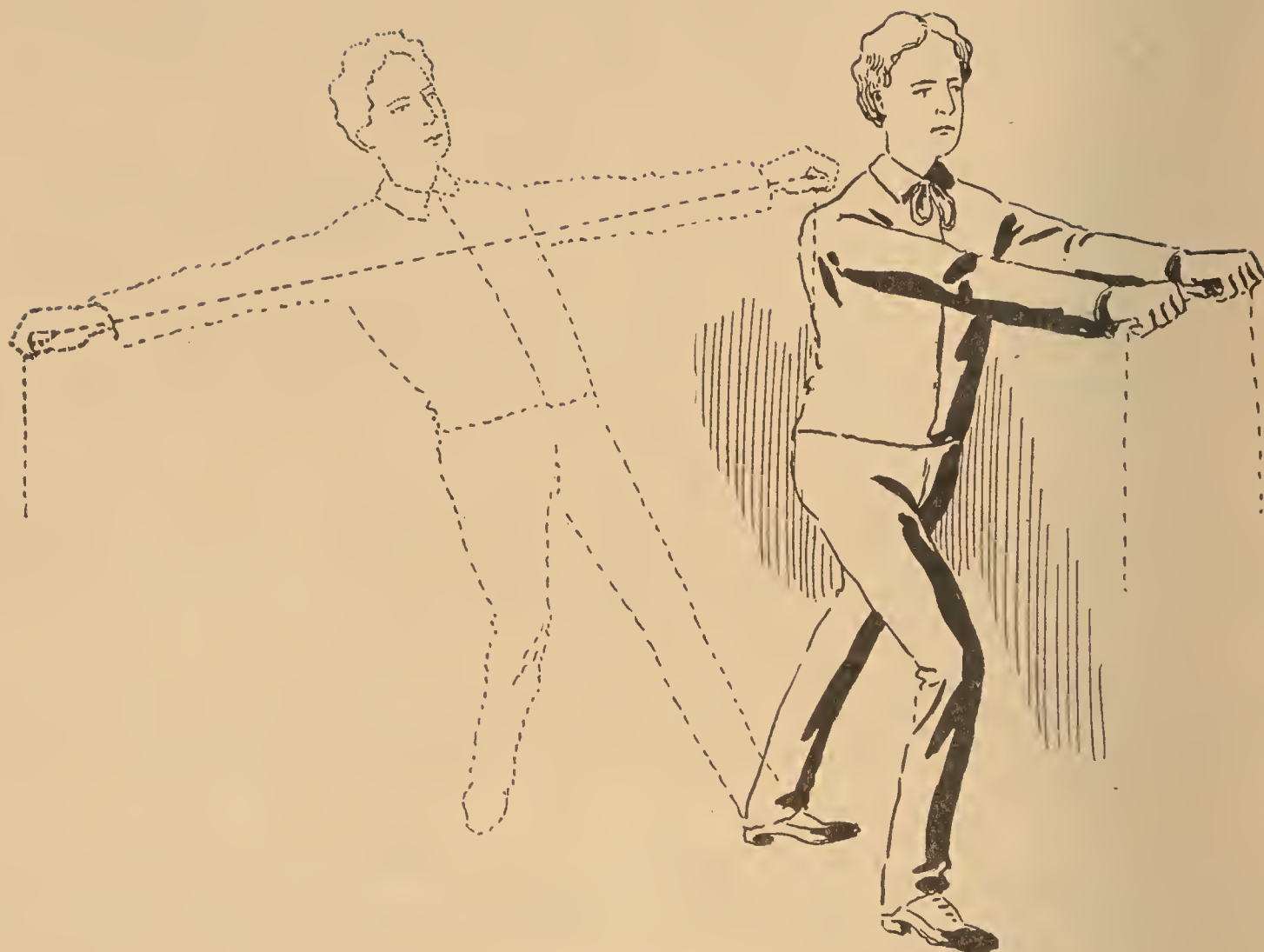


FIG. 282. IMITATION.

FIGURE 100 ENLARGED.—*Explanation:* This is an excellent change from the pushing movement. It involves the stretching action, and must not be confounded with that of pulling. In the latter the direction is backward in a straight line. In stretching, the action is chiefly lateral. On count *one* advance the right foot to the front and grasp the supposed elastic string; on count *two* extend the arms as widely apart as you can while stepping backward on the right foot; on count *three* advance to the first position, bringing the hands together. The main action is on the even-numbered counts—*two, four, six and eight*. The arms should be strongly tensed as the outward pulling occurs, as though the elastic cord were almost too strong for the effort. After eight counts, reverse the standing position and continue for eight more, and so on for thirty-two.

Figure 100.

IMITATION EXERCISE.

FOURTH SET.

One two one two

f

one two

p



FIG. 153. WAIST EXERCISE.

FIGURE 35 ENLARGED.—*Explanation:* This is a beautiful action when performed by a class in unison. Most teachers wish to present their classes to the public, and there are no better exercises than those which occur in the series of the knee, in this of the waist, and in others where the arms aid in giving picturesqueness to the work. The fault of an exercise of this kind is in the inability of the pupil to hinge the body's bending at the waist. Before commencing the practice it is well to place the hands hard against the sides, above the hip bones, and press in to see that the bending occurs there. The arms should form a walking-beam in their action, and must be kept perfectly straight even when they are made to tip. The exercise should commence easily and gradually increase until the bending may be sufficient in time to permit the arms to assume a vertical attitude.

Figure 35.

WAIST EXERCISE.

FIFTH SET.

One two one two

The musical score is written for piano accompaniment, featuring a treble and bass staff for each system. The key signature is one sharp (F#) and the time signature is 2/4. The score consists of 10 systems of music. Above the first system, the words "One two one two" are written, with "V" marks indicating specific measures. The music includes various chords, arpeggios, and melodic lines. The notation is in a standard musical style with notes, rests, and bar lines.



FIG. 160. CHEST EXERCISE.

FIGURE 42 ENLARGED.—*Explanation:* This is an interesting and beautiful exercise as well as one that is of decided value in seeking health or strength. To commence it, take the usual standing position and raise the clinched fists to the upper chest. On count *one* describe a semicircle with the fists by causing them to descend and depart outwardly from the body as they are raised to a new position on a level with the shoulders. All this constitutes count *one*. On count *two* allow the fists to again traverse the path of the semicircle and be brought up to their first position on the upper front chest. Count *three* will be the repetition of count *one*, and so continue until *thirty-two* is reached. It is a series of swinging movements. They strengthen the muscles of the chest and give vigor to the lungs.

Figure 42.

CHEST EXERCISE.

SIXTH SET.

The image shows a musical score for the song "The Rose Tree." It consists of two staves. The top staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). The melody is written in a simple, folk-like style. Above the first four measures of the melody, the words "One", "two", "one", and "two" are written, each with a small accent mark (v) above it. The bottom staff is in bass clef with a common time signature (C). It provides a simple harmonic accompaniment, primarily using chords and single notes. The music is presented on a single page with a decorative border at the top.

A musical score for the song "The Rose Tree". The score is written on two staves. The top staff uses a treble clef and the bottom staff uses a bass clef. The key signature has one flat (B-flat) and the time signature is 2/4. The melody in the treble staff consists of eighth and sixteenth notes, with some beamed sixteenth notes. The bass staff provides a simple accompaniment with chords and single notes. The lyrics "The Rose Tree" are written below the bass staff.

A handwritten musical score for the song 'The Rose Tree'. The score is written on two staves, a treble staff and a bass staff, both with a key signature of one sharp (F#) and a common time signature (C). The melody is written in the treble staff, and the accompaniment is in the bass staff. The music is written in a cursive, handwritten style. The lyrics 'The Rose Tree' are written below the treble staff. The score is on a single page of aged, yellowed paper.

A musical score for the song 'The Rose Tree'. The score is written on two staves. The top staff uses a treble clef and the bottom staff uses a bass clef. The music is in 2/4 time, indicated by the '2' and '4' at the end of the bottom staff. The key signature is one flat (B-flat), indicated by a flat symbol on the first line of the top staff. The melody is written on the top staff, and the accompaniment is written on the bottom staff. The score includes various musical notations such as notes, rests, and bar lines. The title 'The Rose Tree' is written in a decorative font at the top of the page.

A musical score for a piano piece titled "The Rose Tree". The score is written on two staves, treble and bass clef. The key signature is one sharp (F#), and the time signature is 2/4. The melody is in the treble staff, featuring a series of eighth and sixteenth notes, with some triplets. The bass staff provides a simple harmonic accompaniment with chords and single notes. The piece concludes with a double bar line and repeat dots.



FIG. 165. SHOULDER EXERCISE.

FIGURE 47 ENLARGED.—*Explanation:* This action is called plucking grapes. They are situated rather high, and can be reached only by a long stretch of the arm, body and feet. This complicated movement requires music that is specially adapted to the details of the action. On count *one* rise as high as possible on the tips of the toes and raise the right hand as though to take a bunch of grapes. The music will furnish an opportunity for making a special effort as though to leap. This requires a stretching of the arm; the shoulder muscles are taxed to the utmost without strain, and the contiguous muscles are likewise called into action over the front and back of the upper torso. Allow the main effort of reaching to be made with the arm so that it will involve the shoulder as much as possible. The left shoulder should be likewise employed, then both alternately.

Figure 47.

SHOULDER EXERCISE.

FIFTH SET.

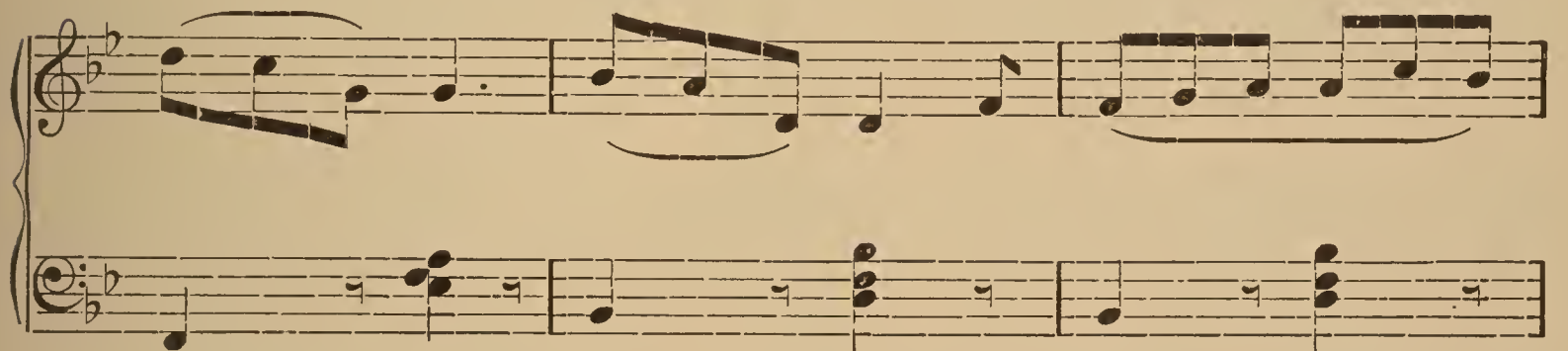
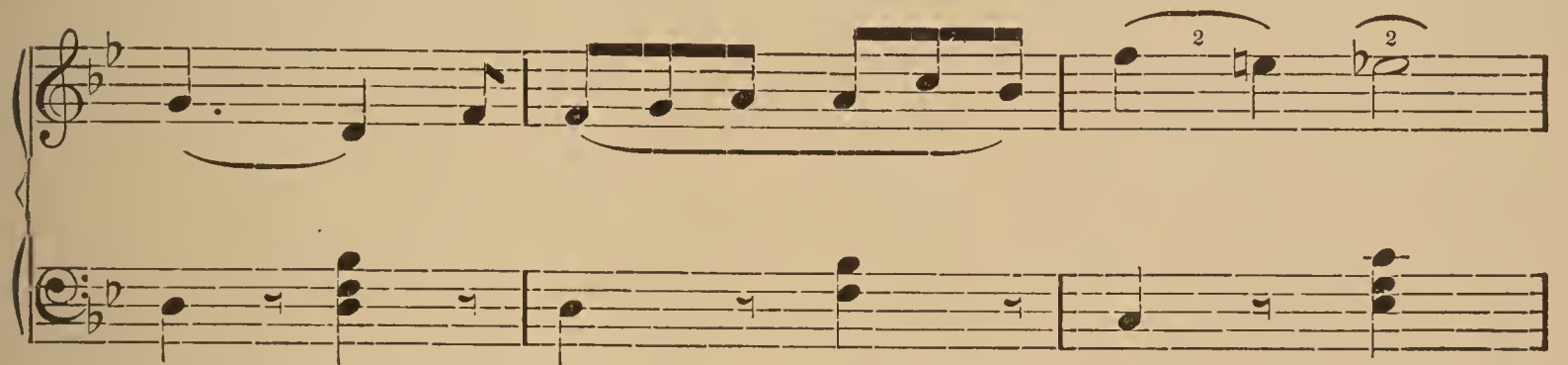




FIG. 177. HAND EXERCISE.

FIGURE 59 ENLARGED.—*Explanation:* Raise the left hand, not above the shoulder, but out from it on a high elevation. Lower the right hand so as to form two obliques, an upper and lower one. Each arm must reverse its position; the left arm coming down to the lower left side, but extended out; and the right arm coming up to the upper right altitude. Each hand describes a semicircle, or the larger part of one. The purpose is to cause the hands, palms and fingers also, to strike each other as they pass. This differs materially from a direct blow of two hands coming against each other. Here there can be no severe blow, as the action is such as to prevent it. The strongest effort will only result in the surfaces skimming past each other.

Figure 59.

HAND EXERCISE.

FIFTH SET.

The first system of musical notation for Figure 59, Fifth Set. It consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb) and a 3/4 time signature. It begins with a piano (p) dynamic marking. The lower staff is in bass clef with the same key signature and time signature. It features a series of chords and single notes, with a melodic line in the upper staff.

The second system of musical notation for Figure 59, Fifth Set. It consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb). The lower staff is in bass clef with the same key signature. It continues the exercise with various chordal textures and melodic fragments.

The third system of musical notation for Figure 59, Fifth Set. It consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb). The lower staff is in bass clef with the same key signature. The exercise continues with a mix of single notes and chords.

The fourth system of musical notation for Figure 59, Fifth Set. It consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb). The lower staff is in bass clef with the same key signature. The exercise continues with a mix of single notes and chords.

The fifth system of musical notation for Figure 59, Fifth Set. It consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb). The lower staff is in bass clef with the same key signature. The exercise continues with a mix of single notes and chords.

The sixth system of musical notation for Figure 59, Fifth Set. It consists of two staves. The upper staff is in treble clef with a key signature of one flat (Bb). The lower staff is in bass clef with the same key signature. The exercise concludes with a final chord and a repeat sign.



FIG. 203. WHOLE BODY EXERCISE.

FIGURE 71 ENLARGED.—*Explanation:* On count *one* let the body down upon the right knee in a lateral direction; not forward or backward. On count *two* place the right hand on the floor so as to support the weight of the torso at least on that arm; on count *three* rise to the kneeling position; on *four*, stand on the feet; on *five*, kneel laterally on the left knee, and repeat as before. Reverse at every four counts. When the weight of the torso is supported by the hand resting on the floor, the arm on the other side of the body should be elevated as high as possible. Every act of kneeling should be graceful and in perfect poise; but this is rarely seen. There is always a free foot in every action or movement that involves stepping, walking or kneeling, and no weight should be permitted on the free foot until it is ready to receive it. Herein is the secret of ease and grace.

Figure 71.

WHOLE BODY EXERCISE.

FIFTH SET.

One two three four five six

seven eight



FIG. 225. RAPID EXERCISE.

FIGURE 77 ENLARGED.—*Explanation:* On count *one* strike backward with the right elbow, and on count *two* strike backward with the left elbow; repeat for thirty-two counts. Unless the highest speed is reached, the exercise will be merely a shoulder movement. The addition of rapidity changes its nature and its value. For systematic practice the following is preferable: On counts *one* to *eight* use the right arm only; on counts *nine* to *sixteen* use the left arm; on counts *seventeen* to *twenty-four* use both alternately; and on counts *twenty-five* to *thirty-two* use both arms together. The time may be doubled by increase in the time of the music, or by rendering two movements to one accent. All the while the muscles should be firmly tensed.

Figure 77.

RAPID EXERCISE.

FIFTH SET.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a time signature of 2/4. It contains a series of eighth and sixteenth notes, including some beamed sixteenth-note patterns. The lower staff is in bass clef with the same key signature and time signature, featuring a steady eighth-note accompaniment. The dynamic marking *mf* is placed above the first measure of the lower staff.

The second system of musical notation continues the exercise with two staves. The upper staff maintains the melodic line with various rhythmic patterns. The lower staff continues the eighth-note accompaniment. The key signature and time signature remain consistent with the first system.

The third system of musical notation consists of two staves. The upper staff features a melodic line with some longer note values. The lower staff continues the eighth-note accompaniment. A dynamic marking *p* (piano) is placed above the final measure of the lower staff.

The fourth system of musical notation consists of two staves. The upper staff continues the melodic development. The lower staff continues the eighth-note accompaniment. A dynamic marking *f* (forte) is placed above the middle of the lower staff.

The fifth system of musical notation consists of two staves. The upper staff continues the melodic line. The lower staff continues the eighth-note accompaniment. The key signature and time signature remain consistent.

The sixth system of musical notation consists of two staves, concluding the exercise. The upper staff ends with a final melodic phrase. The lower staff continues the eighth-note accompaniment until the final measure. A dynamic marking *f* is placed above the middle of the lower staff.



FIG. 278. ARTISANS.

FIGURE 96 ENLARGED.—*Explanation:* This is a peculiar as well as an interesting action, and is quite beneficial to one who is able to do it after mastering the exercises that precede. The question arises whether the right hand shall grasp the end of the handle or the middle of the handle. Some claim the former to be right, others believe in the latter method. Most laborers who are right-handed take the end of the handle in the right hand; some who are right-handed reverse this. On count *one* stoop and fill the shovel; on count *two* rise and throw the contents. The place of digging may be directly in front of the feet, and the heap to be made can be placed to the left side, several feet ahead. After eight counts, reverse and use the other side.

Figure 96.

THE ARTISANS.

SIXTH SET.

One two three four five

The musical score is written for piano and consists of five systems, each with a treble and bass staff. The key signature is one sharp (F#) and the time signature is 3/4. The first system is labeled 'One', 'two', and 'three'. The second system is labeled 'four' and 'five'. The score includes various musical notations such as notes, rests, slurs, and dynamic markings like accents and 'x' marks. The piece concludes with a double bar line and repeat signs at the end of the fifth system.



FIG. 120. ANKLE EXERCISE.

FIGURE 18 ENLARGED.—*Explanation:* This ought to be associated with the light step movements, but its great value in imparting strength to the ankles makes it a more important exercise in this connection. It is by far the hardest of the ankle series. Seemingly it is like Figure 17, but its action proves quite different. The main characteristic is in the raising of the heels as they are turned out on the second, fourth and all even-numbered counts. At no time should the heels touch the floor. In the early practice it is best to raise them but slightly, and turn them out as little as possible while keeping a distinct action. Later on turn the heels out more and more, and raise them higher and higher, until, finally, the whole body is on the jump. You will catch the spirit of the music, but the sensation is so pleasurable that you will overtax your strength before you know it, as is too often the case in the ball-room.

Figure 18.

ANKLE EXERCISE.

SIXTH SET.

This musical score is for an ankle exercise, specifically the sixth set. It is written for piano in 4/4 time and consists of six systems of two staves each. The key signature has one flat (B-flat). The notation includes various musical symbols such as treble and bass clefs, time signatures, and dynamic markings like accents (>) and slurs. The exercise features several triplet patterns, indicated by a '3' over a group of notes. Above the first system, the words 'One' and 'two' are written above the first and second measures respectively, with 'one' and 'two' appearing again above the third and fourth measures. The piece concludes with a double bar line at the end of the sixth system.



FIG. 154. WAIST EXERCISE.

FIGURE 36 ENLARGED.—*Explanation:* This is the most telling of all the movements in the waist series, and may well suit the powers of an athlete. Like every final exercise in a series, it is especially hard and valuable. If a person were to seek this line of training chiefly to acquire great strength, the finals could be classed together as the most powerful known to legitimate physical culture. By this we mean a system of exercises that cannot strain, yet are able to produce the greatest strength. In the above movement it requires flexibility at the waist to bring the forehead to the knee. This is count *one*. On *two* the torso is bent backward and the arms extended behind the body, the farther back the torso is thrown the more severe will be the tax on the muscles of the waist. This is the only exercise ever introduced that compels the waist muscles to yield in the forward action; the hips cannot interfere.

Figure 36.

WAIST EXERCISE.

SIXTH SET.

One two one two one two

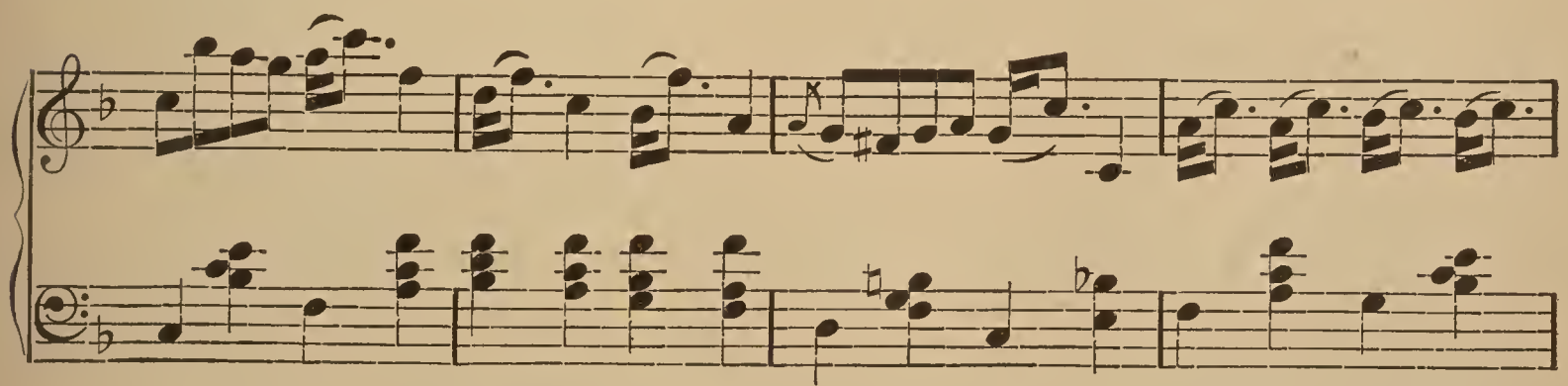
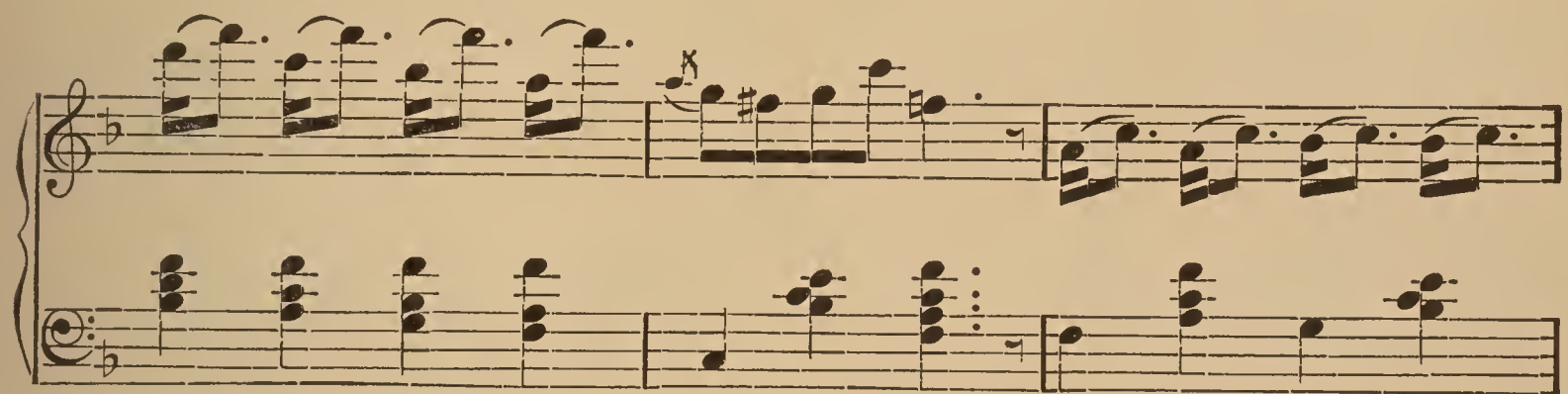
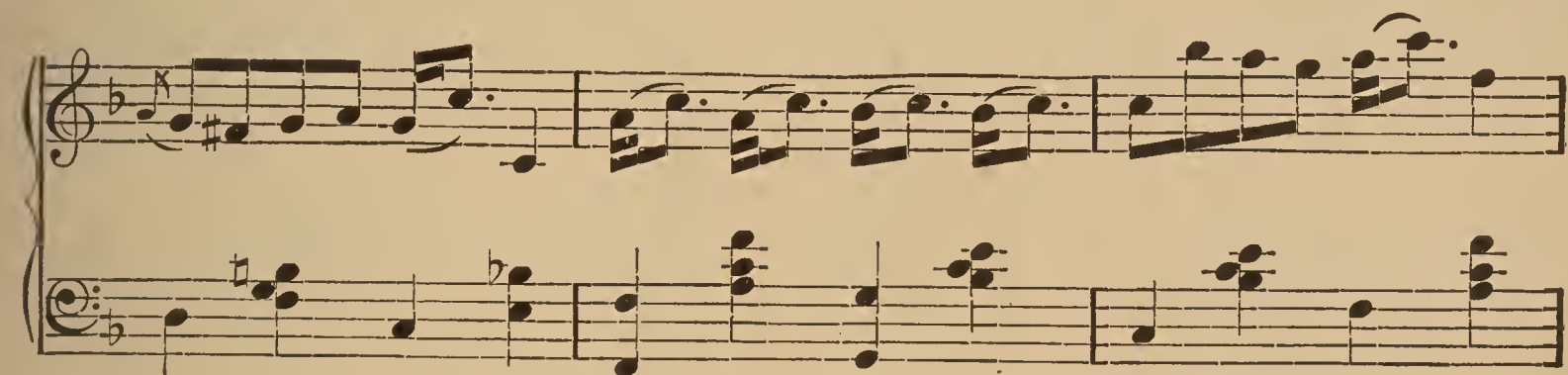
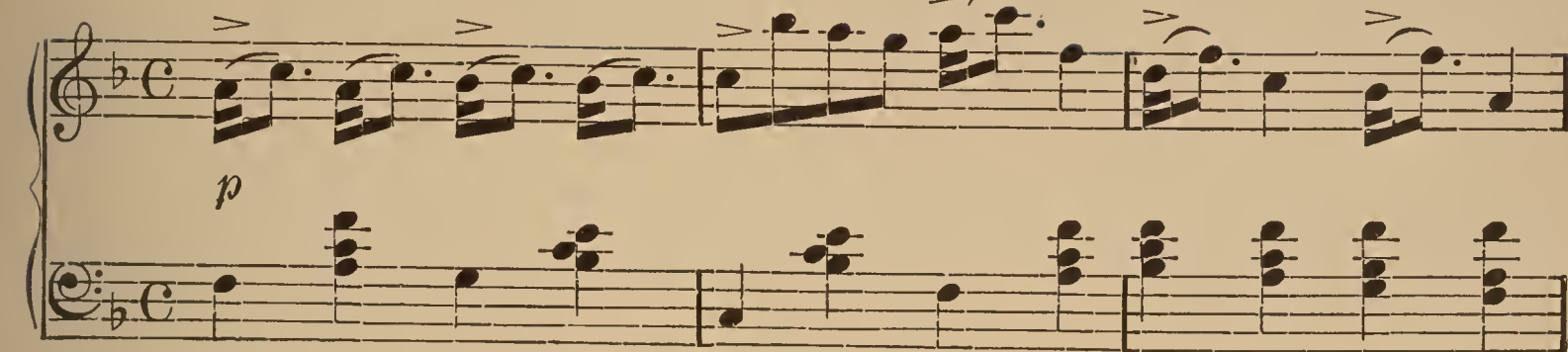




FIG. 172. ARM EXERCISE.

FIGURE 54 ENLARGED.—*Explanation:* The use of a spiral movement is the strongest means of developing the arms, provided all the preceding exercises in this series have been well mastered. Very few arms are over fat; those that are limp and flabby are lacking in beauty and will sooner or later show age by wrinkles or in other ways. A spiral action is a unique invention designed to give the muscles a twist while the arm is passing through a complication of evolutions. There are several lighter spiral exercises, but the one presented herein is the best and heaviest known. On count *one* cause the tightly clinched fists to descend in front of the body; on count *two* carry them out and around, up, over, down to the chest, and there describe a small but perfect circle. This is a good deal of work for count *two*, but it is done quickly. Count *three* is the same as *one*. The pupil will so enjoy the exercise as to get tired and not know it. Hence the benefit.

Figure 54.

ARM EXERCISE.

SIXTH SET.

One

two

one

two

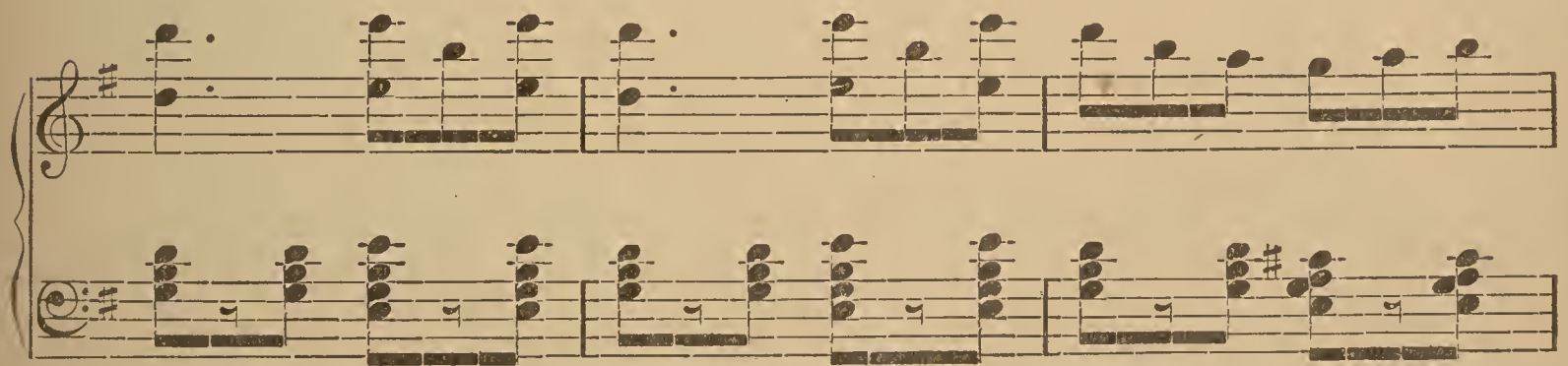
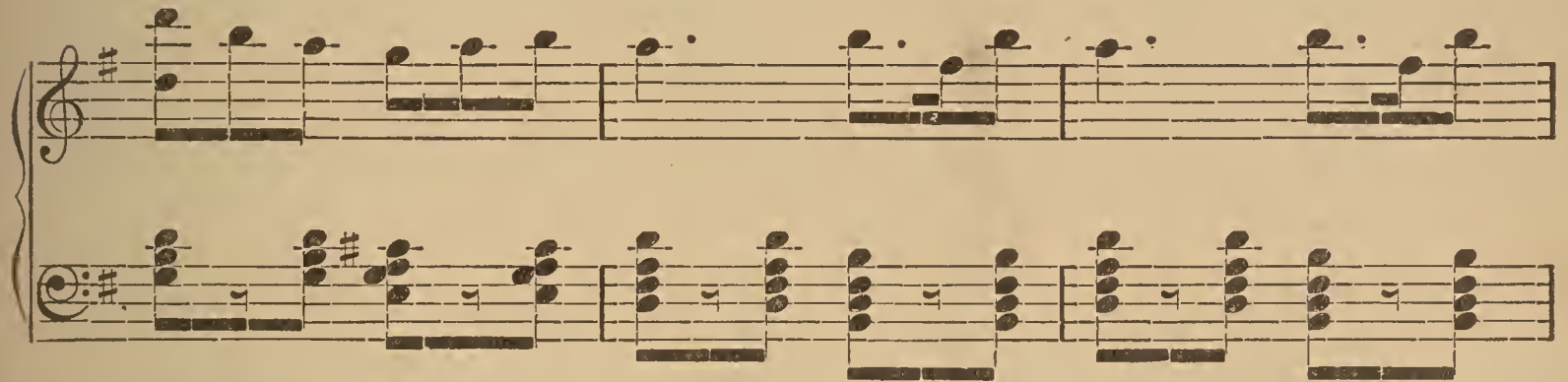
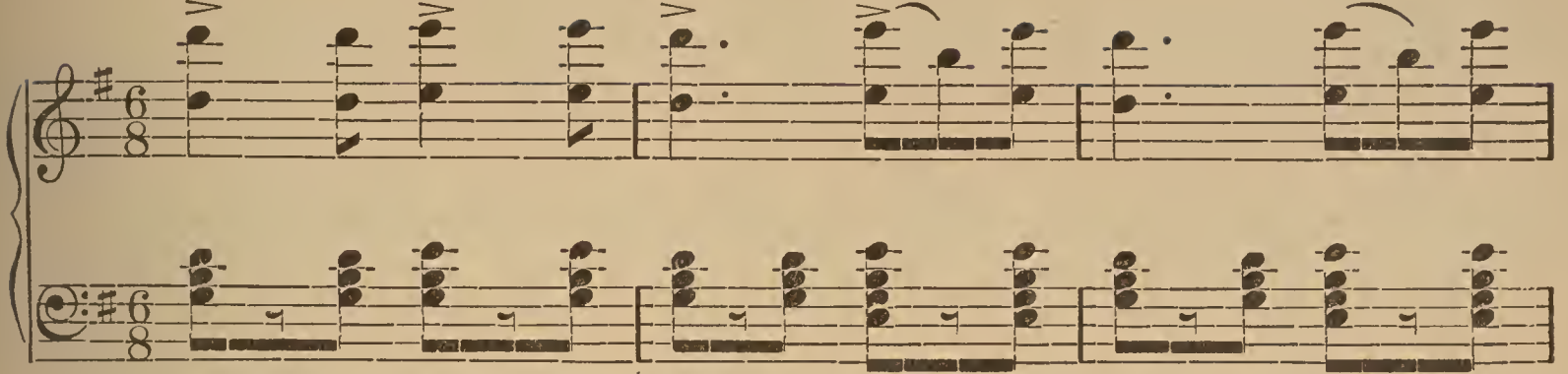




FIG. 178. HAND EXERCISE.

FIGURE 60 ENLARGED.—*Explanation:* When the hands are cold the quickest way to warm them is to perform the movements of Figure 162. It is, however, not possible to obtain warmth either in the hands or feet unless there is a sufficient supply of nutritious food in the system. To eat a light breakfast is sure to leave the blood weak for the whole day. The furnace needs its fuel in advance of use, not when it is getting ready to rest. Music is of the highest importance in developing the vim and spirit of an exercise. On count *one* strike the hands in front of the body; on count *two*, at the back, or behind the body; keeping the arms straight and stiff, so as to throw the energy into the hands. At first the movement should be as slight as can be conveniently made; then permit it to be enlarged, and add force to the blow at the same time.

Figure 60.

HAND EXERCISE.

SIXTH SET.

This musical score is a hand exercise for the sixth set, consisting of six systems. Each system contains two staves: a piano accompaniment in the lower staff and a melodic line in the upper staff. The key signature is B-flat major (two flats), and the time signature is 2/4. The piano accompaniment is primarily composed of chords and single notes, while the melodic line features eighth and sixteenth notes, often with slurs and ties. The first and fourth systems begin with a forte (*ff*) dynamic marking. The exercise concludes with a final double bar line at the end of the sixth system.



FIG. 226. RAPID EXERCISE.

FIGURE 78 ENLARGED.—*Explanation:* This is the most enjoyable of the speed exercises, and becomes still more interesting by allowing the musician to increase the time of the music. It is an apparent attempt to take a big jump, with no prospect of realizing the expectation. On count *one* the fists are brought down from their raised position over the head to the lower attitude behind the knees. The latter are to be kept bent or in a flexible condition ready to spring. On count *two* raise the hands to the head just above the forehead, and lean back a few inches with the impulse of the music. Soon the knees, hips, torso and general body will be in a rocking mood, while the arms are passing rapidly from one elevation to the other, making constant preparations for imaginary jumps.

Figure 78.

RAPID EXERCISE.

SIXTH SET.

A musical score for the song "The Rose Tree". The score is written on two staves, Treble and Bass clef, with a key signature of one sharp (F#) and a common time signature (C). The melody is in the Treble clef, and the accompaniment is in the Bass clef. The melody consists of a series of eighth and sixteenth notes, while the accompaniment features a steady bass line with chords and single notes. The score is presented on a single page with a decorative border.

A musical score for a song titled "The Rose Tree". The score is written on two staves. The top staff uses a treble clef and the bottom staff uses a bass clef. Both staves are in the key of D major, indicated by two sharps (F# and C#) at the beginning of each staff. The time signature is 4/4, shown as a '4' over a '4'. The melody is written on the top staff, and the accompaniment is written on the bottom staff. The melody consists of a series of eighth and quarter notes, with some measures containing beamed eighth notes. The accompaniment consists of a steady bass line with chords, primarily using quarter and eighth notes. The piece concludes with a double bar line and repeat dots at the end of the bottom staff.

A musical score for a song titled "The Rose Tree". The score is written for a piano, with a treble and bass staff. The key signature is one sharp (F#), and the time signature is 2/4. The melody is in the treble staff, and the accompaniment is in the bass staff. The music is in common time, with a 2/4 time signature. The melody consists of a series of eighth and sixteenth notes, with a final cadence. The accompaniment features a simple harmonic pattern, with chords and single notes. The score is written in a clear, legible style, with a large, ornate initial 'M' at the beginning of the first staff.

A musical score for the song 'The Rose Tree'. It features two staves: a treble staff and a bass staff, both in the key of D major (two sharps). The melody is written in the treble staff, and the accompaniment is in the bass staff. The music is in 4/4 time. The melody consists of a series of eighth and quarter notes, with some rests. The accompaniment consists of chords and single notes. The score ends with a double bar line.



FIG. 262 LIGHT STEP.

FIGURE 84 ENLARGED.—*Explanation:* Here comes the rocking run made famous through the Ralston System. There is a fascination about it that is not hard to explain when it is once witnessed properly performed. Yet it is a severe test of a strong heart. We advise all persons of weak hearts to let it alone until a year or more of time has been devoted to the preceding light steps. Stand on the right foot, with the head down in front and the left foot raised behind, and on counts *one* and *two* give two jumps on the right foot. Then shift the carriage of the body so that the chest faces the ceiling above; put all the weight on the left foot, while the right is raised in front; and on counts *three* and *four* give two jumps on the left foot. The lower down the head is carried on counts *one* and *two*, and the farther back it is carried on *three* and *four*, the greater the effect and results.

Figure 84.

LIGHT STEP EXERCISE.

SIXTH SET.

This musical score is for a piano exercise in G major, 4/4 time, consisting of 32 measures. It is divided into four systems, each with a treble and bass staff. The exercise features a light, rhythmic pattern in the right hand, often using triplets and slurs, and a more complex, arpeggiated pattern in the left hand. The key signature has one sharp (F#), and the time signature is 4/4. The notation includes various musical symbols such as notes, rests, slurs, and triplets. A dynamic marking of *f* (forte) appears in the third system. The score concludes with a double bar line at the end of the fourth system.



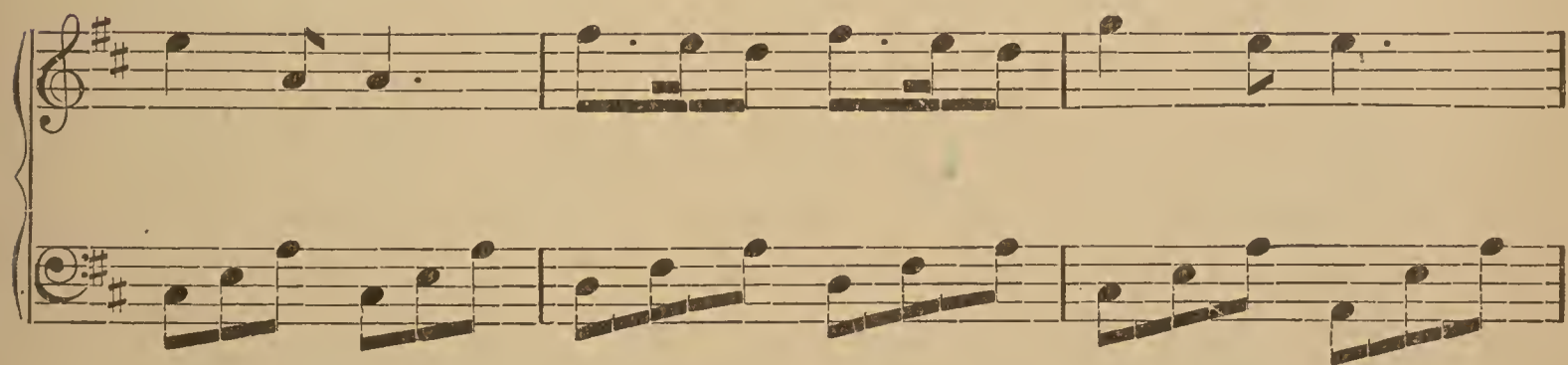
FIG. 284. IMITATION.

FIGURE 102 ENLARGED.—*Explanation:* This is a representation of pulling, and it may be performed in a number of ways. On count *one* pull straight backward; on count *two* relax and take an ordinary standing attitude; on count *three* pull backward again; and so continue for thirty-two counts. The pulling may be done by the stiff arms unbent at the elbow; in which case the body would do the backing and pulling by a step of the foot. It may be done by the arms bending and the body remaining still, or it may be done by the arms bending and the body moving backward, in which case the distance would be greater. All these are important variations of one principle in muscular development. The arms should be energized and the torso be made to exert much strength even to the waist muscles.

Figure 102.

IMITATION EXERCISE.

SIXTH SET.



END OF THE ENTERTAINMENT COURSE.

The forty-two selected exercises that are given on the pages immediately preceding constitute the very best course of pleasurable diversion that can be devised by any human being for the passing of a happy hour. They are better than dancing, for they leave nothing but exhilaration in place of weariness. A person may work hard all day, and come to this Ralston entertainment in the evening and go away rested. This seeming paradox is easily proved true. Life is activity. To live is to act, not slumber. The man or woman who lounges about all day is far more tired than the one who toils and labors. A wearied woman says, "I have had all the exercise I need, for I work hard enough, goodness knows; and I am too tired to indulge in any physical training." Yet she is induced to relieve those weary muscles by establishing a balance in her body by the exhilaration of others; so she comes to the Ralston entertainment, practices, enjoys herself, and goes away exclaiming, "My! I never felt better in my life. What a change! I went to the meeting with every bone in my body aching, and here I am as rested as if I had been asleep all night." On the other hand, the inactive woman says, "I am not used to exercise of any kind. I cannot endure it. I am too weak." She goes to the Ralston entertainment, and comes home refreshed. In a few more meetings she is no longer weak; her strength is returning because she is using the faculties of life; she is living.

Rests between exercises are of the greatest importance. The art of hurrying to place and back again to the chair should be perfected. Teach the participants not to step on the heels with any weight, but to carry the body on the balls of the feet. This prevents jarring or straining the spine and nerves. Let one or two movements be practiced, and then have a rest follow. Our plan is to give the entertainers one figure for two minutes, then to allow them to sit for twenty seconds; and so continue for the full session. This prevents exercising long enough to get tired, and does not give time for catching cold. A clumsy teacher keeps the figure going until everybody is tired, then allows a long rest to follow, thus doing a double injury. Weariness attracts a cold.

FOURTH DEPARTMENT.

Public School Course

IN

Ralston Physical Culture.

This is a brief course of the most valuable exercises selected solely for hygienic purposes. It requires just time enough on each occasion to enable the full series to be performed in fifteen minutes. As compared with the preceding courses in the length of time required to properly learn the movements, it is well to state that the Scientific Course, consisting of all the system of 102 exercises, cannot be learned in less than six weeks, and the time required to master them is indefinite. One may improve for many months and years in this line of development. In the Entertainment Course it is possible to learn the exercises in six hours, devoting one session at a time to seven of them; but, after they are learned and thoroughly understood, it is not policy to use over two sets in one entertainment, which would allow fourteen different exercises. These should be repeated, with rests, as long as the interest is maintained.

The public school course is a very brief set of movements designed to occupy fifteen minutes, during which no rest is needed, as the pupils are supposed to sit or be inactive most of the time otherwise. We have selected the ten best exercises for purposes of health alone, not of amusement or entertainment; although they are culled from the latter course. The musical airs are placed in the order of use in the group, so that the musician may pass from one to the other without loss of time consumed in hunting through the book for the proper pages.

The right to use this book is confined to a public school teacher who is a tenth degree Star Ralstonite; and the right to use the music is confined to one who is likewise of such degree. If objection be made to this rule, it may be said that it is our purpose to have every intelligent man, woman, young man and young woman become a tenth degree Star Ralstonite.



FIG. 103. IRON LEGS.

FIGURE 1 ENLARGED.—*Explanation:* The purpose of these extended descriptions of the exercises is to make clear to the student of this course the finest details of action connected with the movements. It was proper that a whole series should appear together on a single page, so that the eye might discern and compare the different phases of the system as far as it applies to each part of the body. Here a whole page is devoted to a single exercise which is seen in enlarged form, and is followed by a clearer explanation than can be crowded into a small space. The music is then placed directly opposite for the greatest convenience to teacher and musician. The Iron Legs series begins with a very gentle exercise. The best way of performing it is to give a swinging motion to the body, dipping back a little as the knees bend forward, and pitching the head slightly forward as the knees are straightened. The pleasure is very great if there is no jerk or jar in the action.

Figure 1.

IRON LEGS.

FIRST SET.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a 2/4 time signature, featuring a melody of eighth and sixteenth notes. The lower staff is in bass clef, providing a harmonic accompaniment with chords and single notes. Pedal markings ('Ped.') are placed below the first and third measures, each preceded by an asterisk (*).

The second system continues the piece. The upper staff has a melody with some rests. The lower staff features a more active accompaniment. A 'ff' (fortissimo) dynamic marking is present above the lower staff in the third measure, followed by a 'Ped.' marking. Pedal markings with asterisks are also present at the beginning and end of the system.

The third system shows the continuation of the musical themes. The upper staff has a melody with dotted rhythms. The lower staff has a steady accompaniment. Pedal markings with asterisks are placed below the first, third, and fifth measures.

The fourth system continues the composition. The upper staff features a melody with eighth-note patterns. The lower staff provides a consistent harmonic base. Pedal markings with asterisks are placed below the first, third, and fifth measures.

The fifth system continues the musical themes. The upper staff has a melody with some rests. The lower staff features a more active accompaniment. A 'ff' (fortissimo) dynamic marking is present above the lower staff in the third measure, followed by a 'Ped.' marking. Pedal markings with asterisks are also present at the beginning and end of the system.

The sixth system is the final one on the page. The upper staff has a melody that concludes with a half note. The lower staff provides a final accompaniment. Pedal markings with asterisks are placed below the first, third, and fifth measures.



FIG. 221. RAPID EXERCISE.

FIGURE 73 ENLARGED.—*Explanation:* Any rapid movement of a muscle sets the blood throbbing quickly through the veins, and the nerves respond by a feeling of life. A quick step, a rapid lifting of the arm, or anything that involves speed, is of the highest value in waking up a sluggish body. Sometimes a headache that is due to a clogging of the system or a stagnation of the blood in the veins of the head, is instantly cured by a quick motion of some part of the body. In the present movement the right hand must be made to pass rapidly around the left, the latter being held still. After eight counts, reverse by keeping the right hand still and causing the left to pass around it. If the speed is good, there will be two or more revolutions on each count. Reverse by changing the direction, also by causing both hands to revolve about each other.

Figure 73.

RAPID EXERCISE.

FIRST SET.

The musical score is written for piano in B-flat major (two flats) and 3/4 time. It consists of six systems of staves. The first system includes a treble and bass staff with a *pp* dynamic marking. The second system is identical to the first. The third system features a treble staff with sixteenth-note runs and a bass staff with chords. The fourth system continues with similar patterns. The fifth system has a treble staff with eighth-note runs and a bass staff with chords. The sixth system includes a treble staff with a *sfz* marking, a *p* marking, and first/second endings, and a bass staff with rests and concluding notes.



FIG. 159. CHEST EXERCISE.

FIGURE 41 ENLARGED.—*Explanation:* Here is another of those immensely valuable exercises that are capable of overcoming disease in the most unexpected manner. The seat of life is in the chest. The present movement is the very best of all for increasing the vitality of the lungs, and that means the vigor of the whole body. The music should be specially adapted to the action, as it is of a double nature. On count *one* place the left hand on the chest, and strike the back of that hand with the palm of the right on count *two*. Tapping the chest was always a valuable means of increasing its vitality, but most pupils strike too hard. This enables one to accomplish the desired end, but the blow cannot be too hard when dealt first to the back of the hand. The under hand may be made to travel over the entire chest surface; then go back again, using the right as the under hand.

Figure 41.

CHEST EXERCISE.

FIFTH SET.

One two three four five six

Play fast.

The musical score is written for piano in 6/8 time, featuring six systems of music. The first system includes fingerings for notes 1 through 6. The tempo is marked "Play fast." The score is written in a key signature of one flat (B-flat) and consists of six systems of music. Each system contains a treble and bass staff. The first system includes fingerings for notes 1 through 6. The tempo is marked "Play fast." The score is written in a key signature of one flat (B-flat) and consists of six systems of music. Each system contains a treble and bass staff. The first system includes fingerings for notes 1 through 6. The tempo is marked "Play fast."

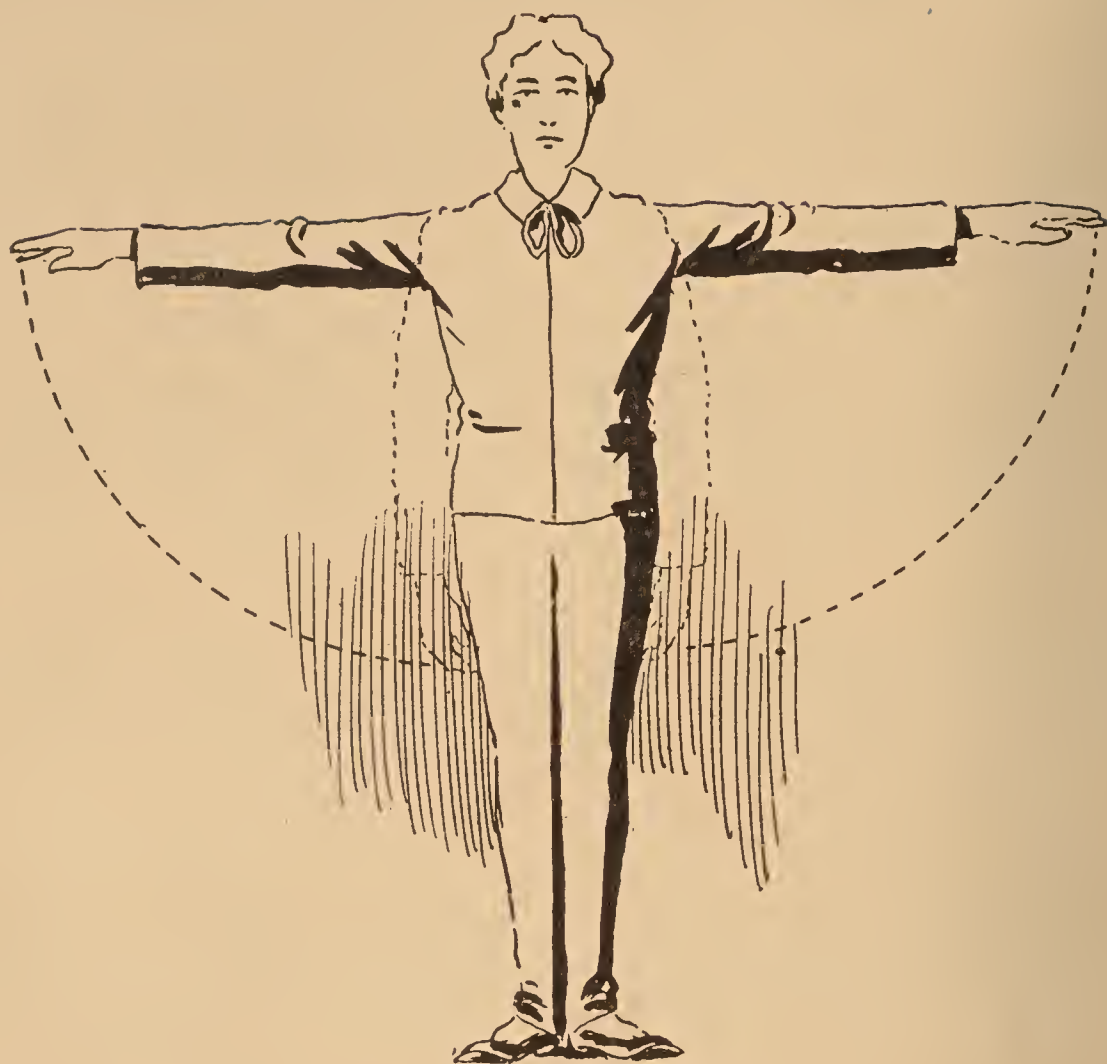


FIG. 171. ARM EXERCISE.

FIGURE 53 ENLARGED.—*Explanation*: In this movement the tax on the arm muscles becomes greater than in any other of the series thus far given. It can be commenced either way, just as the teacher catches the accent, or as the musician develops it. One way is to raise the arms laterally as the attitude of preparation; and bring them down stiff against the sides by an outward swing on count *one*; see that the hands describe arcs of circles, otherwise the whole value of the exercise is lost. On count *two* raise them to the attitude of preparation. The other way is to begin with the hands at the sides and to raise them on count *one* and lower them on count *two*. This depends largely upon the way the music is played. The time should be quite slow until the action is learned, then it may be made faster; but this is to be done gradually. Do not allow the muscles to become limp while the exercise is being performed.

Figure 53.

ARM EXERCISE.

FIFTH SET.

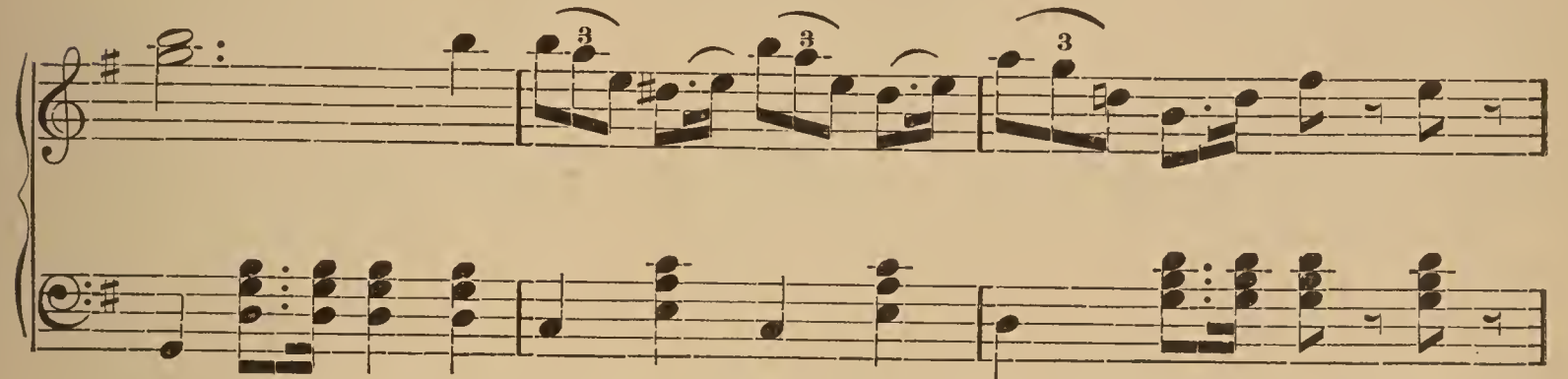
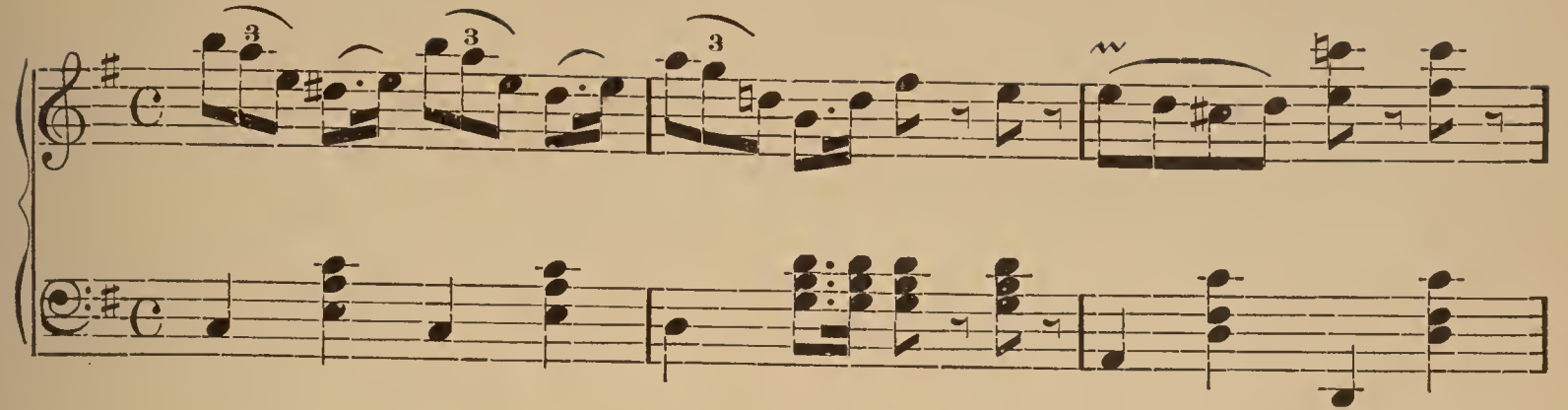




FIG. 270. ARTISANS.

FIGURE 92 ENLARGED.—*Explanation:* This is the bell-ringer. It is exquisitely beautiful. There are several ways of performing the movement, and the music has much to do with the success of the action, as well as its enjoyment. On count *one* step right oblique forward, raising the hands to grasp the supposed bell-rope, and lifting the left foot close behind the ankle of the right. On count *two* step obliquely backward on the left foot, lift the right in front a few inches, and pull hard down on the rope. On count *three* repeat the combined action of count *one*; *four* is the same as *two*. Allow eight counts for the right side and eight for the left, repeating until *thirty-two* is reached. At the first practice it is well to keep both feet on the floor until the full rhythm of the action has been acquired; then the dainty lifting of the feet adds to the artistic value of the exercise.

Figure 92.

THE ARTISANS.

SECOND SET.

One two three four

This musical score is for a piece titled "THE ARTISANS. SECOND SET." in 3/4 time. It consists of a piano accompaniment and a vocal line. The piano part is written in the bass clef with a key signature of one flat (Bb). The vocal line is written in the treble clef with a key signature of one flat (Bb). The score is divided into four measures, each labeled with a number (One, two, three, four) and a measure rest symbol. The piano accompaniment provides harmonic support for the vocal line, with chords and single notes. The vocal line features a melody that is repeated in each measure, with the piano part providing a steady accompaniment. The score ends with a double bar line and a repeat sign.

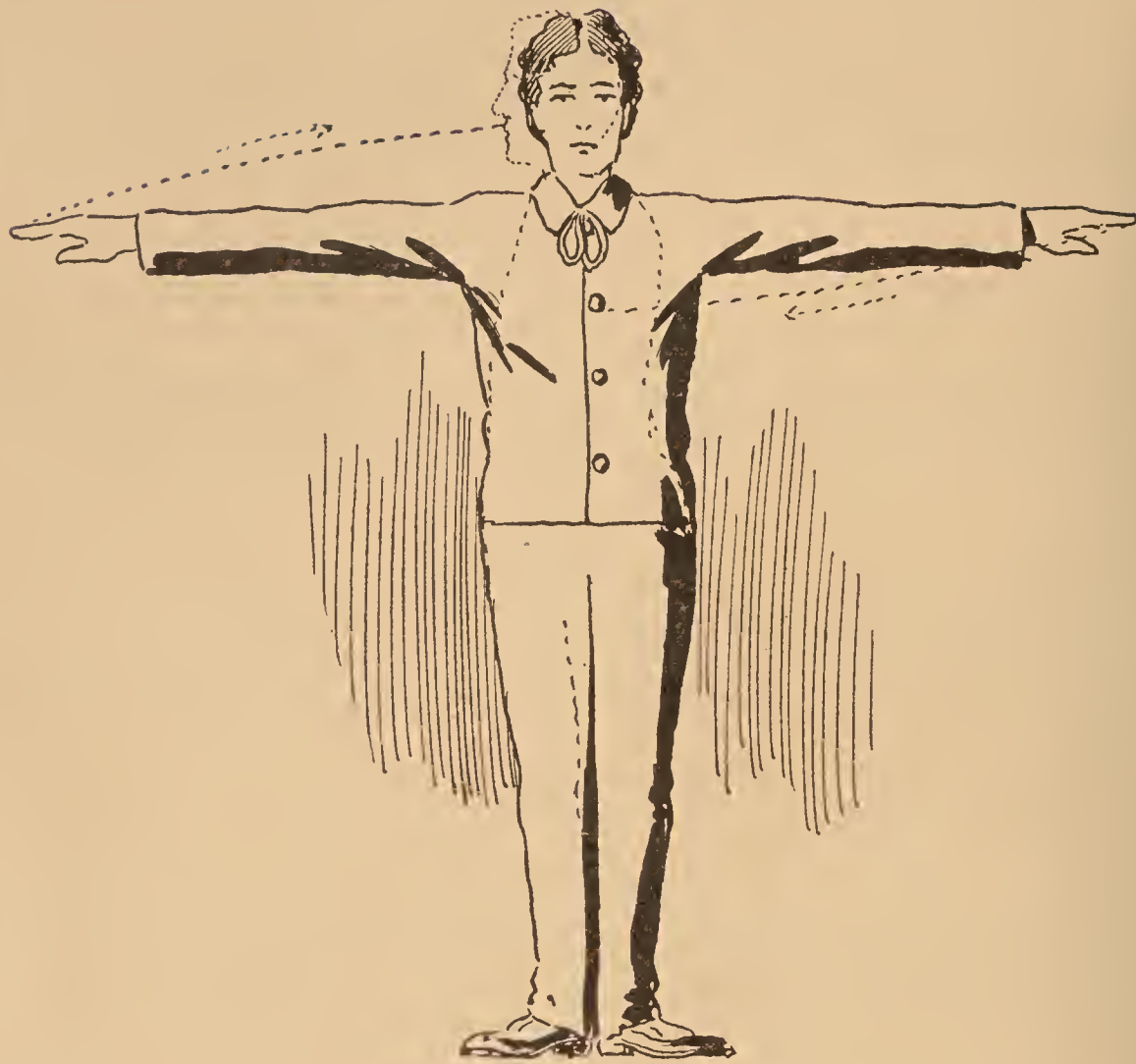


FIG. 152. WAIST EXERCISE.

FIGURE 34 ENLARGED.—*Explanation:* This is a very interesting as well as beneficial action, provided all the requirements are strictly observed. The heels should be together, toes out; the calves of the legs should touch, and be held firmly against each other; there must be no twisting of the lower half of the body, for the tax would then be removed entirely from the waist and placed at the ankles without benefit to them. Imagine that the legs are pinioned together and held in a vice, so they cannot move. On count *one* swing the extended arms around to the right. On count *two* they should swing to the left. Keep the arms well back so as to make them as one long pole, and do not lower them from a position parallel with the floor. See that the waist gets all the tax. A pleasant way of performing the exercise is to commence with short movements to the right and left, and gradually increase their extent.

Figure 34.

WAIST EXERCISE.

FOURTH SET.

One two three

This system contains the first three measures of the exercise. The treble clef staff has a key signature of one sharp (F#) and a common time signature (C). Measure 1 is marked 'One' with an accent (>) and contains a half note chord of D4 and F#4. Measure 2 is marked 'two' with an accent (>) and contains a half note chord of E4 and G#4. Measure 3 is marked 'three' with an accent (>) and contains a half note chord of F#4 and A4. The bass clef staff contains a half note chord of C3 and E3 in measure 1, a half note chord of D3 and F#3 in measure 2, and a half note chord of E3 and G#3 in measure 3.

four five six

This system contains measures 4, 5, and 6. Measure 4 is marked 'four' with an accent (>) and contains a half note chord of G#4 and B4. Measure 5 is marked 'five' with an accent (>) and contains a half note chord of A4 and C5. Measure 6 is marked 'six' with an accent (>) and contains a half note chord of B4 and D5. The bass clef staff contains a half note chord of F#3 and A3 in measure 4, a half note chord of G#3 and B3 in measure 5, and a half note chord of A3 and C4 in measure 6.

This system contains measures 7, 8, and 9. Measure 7 contains a half note chord of C5 and E5. Measure 8 contains a half note chord of D5 and F#5. Measure 9 contains a half note chord of E5 and G#5. The bass clef staff contains a half note chord of B2 and D3 in measure 7, a half note chord of C3 and E3 in measure 8, and a half note chord of D3 and F#3 in measure 9.

This system contains measures 10, 11, and 12. Measure 10 contains a half note chord of F#5 and A5. Measure 11 contains a half note chord of G#5 and B5. Measure 12 contains a half note chord of A5 and C6. The bass clef staff contains a half note chord of E3 and G#3 in measure 10, a half note chord of F#3 and A3 in measure 11, and a half note chord of G#3 and B3 in measure 12.

This system contains measures 13, 14, and 15. Measure 13 contains a half note chord of B5 and D6. Measure 14 contains a half note chord of C6 and E6. Measure 15 contains a half note chord of D6 and F#6. The bass clef staff contains a half note chord of A3 and C4 in measure 13, a half note chord of B3 and D4 in measure 14, and a half note chord of C4 and E4 in measure 15.



FIG. 158. CHEST EXERCISE.

FIGURE 40 ENLARGED.—*Explanation:* This excellent movement is known by our classes as the Perpendicular Drill, and is one of the most effective ever invented. Nothing like it was ever known until it was used by the Ralston System, for which it was specially prepared. It is as different from the calisthenic movement, which it seems to resemble, as day is from night. This action requires that the hand be clinched, energized and kept under the arm. On count *one* the fist is to be brought up so as to strike the under part of the arm at the arm-pit, not in front but under. This is very difficult. On count *two* throw the fist downward in a straight line; continue for eight. On *nine* raise the left fist under the left arm, striking hard; then lower it on *ten* and continue; on *seventeen* raise the right fist; on *eighteen* raise the left and lower the right; on *twenty-four* raise both, and continue to *thirty-two*.

Figure 40.

CHEST EXERCISE.

FOURTH SET.

One two one two

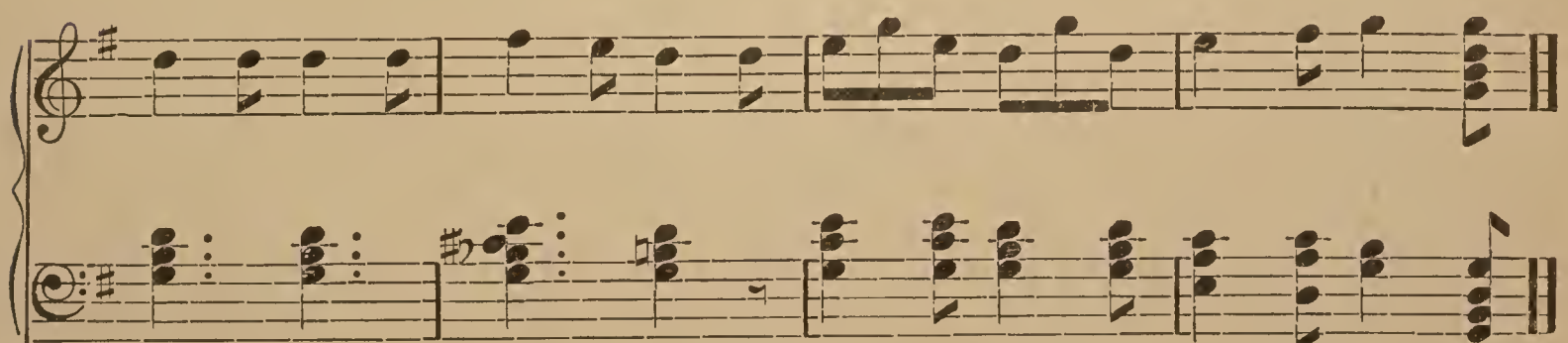




FIG. 164. SHOULDER EXERCISE.

FIGURE 46 ENLARGED.—*Explanation:* The tasks grow harder as we proceed. The above exercise will eat up any surplus fat at the shoulders and upper parts of the torso; yet will add flesh where that is lacking. You know that fat is not flesh; it is not the result of nutrition but of stagnation, and should be thrown off when over-accumulated. On the other hand, flesh is the result of nutrition, and is really nutrition in itself. Thus the same exercise may reduce the weight of one person by eliminating the fat, and may increase the weight of another by adding flesh. In the above movement raise the hands over the head as high as possible, with the fists clinched. On count *one* bring them down in a wide, sweeping semi-circle, striking the sides of the hips; on count *two* return them to the high altitude, striking the fists together over the top of the head.

Figure 46.

SHOULDER EXERCISE.

FOURTH SET.

One two one two one two one two

The musical score is written for piano in common time (C). It consists of six systems, each with a treble and bass staff. The first system includes a rhythmic count: 'One two one two one two one two' with accents over the notes. The melody in the treble staff features eighth and sixteenth notes, often beamed together, with some notes marked with accents. The bass staff provides a harmonic accompaniment with chords and single notes. The second system begins with a repeat sign and a first ending bracket. The third system features a slur over the first four measures of the treble staff. The fourth system continues the melodic and harmonic patterns. The fifth system also includes a repeat sign and a first ending bracket. The sixth system concludes the exercise with a final cadence in both staves.



FIG. 153. WAIST EXERCISE.

FIGURE 35 ENLARGED.—*Explanation:* This is a beautiful action when performed by a class in unison. Most teachers wish to present their classes to the public, and there are no better exercises than those which occur in the series of the knee, in this of the waist, and in others where the arms aid in giving picturesqueness to the work. The fault of an exercise of this kind is in the inability of the pupil to hinge the body's bending at the waist. Before commencing the practice it is well to place the hands hard against the sides, above the hip bones, and press in to see that the bending occurs there. The arms should form a walking-beam in their action, and must be kept perfectly straight even when they are made to tip. The exercise should commence easily and gradually increase until the bending may be sufficient in time to permit the arms to assume a vertical attitude.

Figure 35.

WAIST EXERCISE.

FIFTH SET.

One two one two



FIG. 178. HAND EXERCISE.

FIGURE 60 ENLARGED.—*Explanation:* When the hands are cold the quickest way to warm them is to perform the movements of Figure 162. It is, however, not possible to obtain warmth either in the hands or feet unless there is a sufficient supply of nutritious food in the system. To eat a light breakfast is sure to leave the blood weak for the whole day. The furnace needs its fuel in advance of use, not when it is getting ready to rest. Music is of the highest importance in developing the vim and spirit of an exercise. On count *one* strike the hands in front of the body; on count *two*, at the back, or behind the body; keeping the arms straight and stiff, so as to throw the energy into the hands. At first the movement should be as slight as can be conveniently made; then permit it to be enlarged, and add force to the blow at the same time.

Figure 60.

HAND EXERCISE.

SIXTH SET.

This musical score is for a hand exercise, specifically the sixth set of Figure 60. It is written for piano in B-flat major (two flats) and 2/4 time. The piece consists of six systems, each with a treble and bass staff. The first and fourth systems begin with a forte (*ff*) dynamic marking. The melody in the treble staff is characterized by eighth-note patterns, often beamed in pairs, and includes various rests and slurs. The bass staff provides a harmonic accompaniment using chords and single notes. The exercise concludes with a double bar line at the end of the sixth system.

END OF THE PUBLIC SCHOOL COURSE.

While the ten exercises and ten musical airs are interesting and catchy, their chief value is in their effect upon the health of pupils. They may be given in ninety seconds each, and thus occupy the time of fifteen minutes, if they follow each other without delay. As they are supposed to be used day after day, no time need be taken in explaining them; nor is an exact performance of them necessary to begin with. In a few days or weeks every detail will be known. This method would not prove satisfactory in the other courses, for the purpose there is to acquire as thorough a knowledge as possible and complete the training in a given term.

The Public School Course may require one session of extra length to open with, in order to start the exercises aright. When this has been accomplished, the daily recreation should be quick, bright and interesting. The question of keeping the pupils on their feet for fifteen minutes may be settled in this way: If they have just come in from the opening hour of morning, or from their recess, it would not be advisable to weary them by a continuous session of fifteen minutes, as they will commence the exercises with muscles already tired from walking or playing. This must always be considered; and we have, therefore, advised against giving physical training too soon after the pupils come in. The walk to school and the play of recess furnish sufficient recreation for an hour at least.

When the pupils have been shut in for some length of time, say from sixty to ninety minutes, their heads become weary, their blood sluggish, and the faculties are deadened. Then they should be given fifteen minutes of the freshest air, by opening all windows, and the ten exercises of the Public School Course should be given. We have had occasion to advise this to teachers who had been in the habit of opening the day with exercises and closing with exercises, but who found that their pupils did not improve in health by practicing after a walk and again just before a walk. Under our plan they gave the exercises an hour after school opened, then repeated them midway between that time and the hour of adjournment. Says a teacher: "My scholars feel better and study better since I have adopted these Ralston ideas." The brightest pupils we have ever seen were so trained.

FIFTH DEPARTMENT.

Conservation of Vitality

THROUGH THE

Laws of Grace and Poise in Exercise.

THERE are so many bad ways of performing good exercises; and so many unsatisfactory results that are due to the clumsy work of pupils, that we propose in this volume to go to the root of the difficulty and remove the cause. The best exercise is like the best piece of music; its beauty depends first upon itself, and second upon the way it is performed. We have all known good music to be badly rendered. It is not pretended that an artist can make a gem out of an unworthy piece, nor can a good performer endow a wrong exercise with charms.

The first of all faults in the management of the body is the use of straight lines when unnecessary; and this has much to do with the fatigue that follows every muscular exertion. If you will draw a line as straight as you can and look at it, you will see the



usual standing attitude of the pupil of either sex, who expects to make progress in physical culture. He believes he must stand straight for he has heard that the lolling attitude is bad, that round shoulders are worse, and a hollow chest is the acme of error; so he

attempts to remove all these faults in one straight line. He does not know that the latter is fully as bad an error as any of the former. With the same idea, the ordinary school teacher instructs the round-shouldered scholar to throw the shoulders back a long way, and thus overcome the front defect. She does not stop to think that the hollow at the back is fully as serious as that which she has attacked in front. Let the lungs be properly developed and the shoulders will take care of themselves; nor will a forced attitude cover over an inherent fault so as to blind the eyes of nature.

Looking at the lines in the foregoing paragraph you will see that the one to the left is straight. This is not graceful, even if you see a soldier assuming it. Nature cannot intend to teach us to adopt straight lines as she never made one herself. All creation is in repose and action; but there is no still straight line in the universe, and no motion that proceeds in a straight line. The orbs are round; they have no corners, no sides, no flat surfaces. They swing in orbits that are shaped in curves. A stone thrown in the air does not return straight to the earth; it describes a parabolic curve. Nor



Fig.285.



Fig.286.



Fig.287.

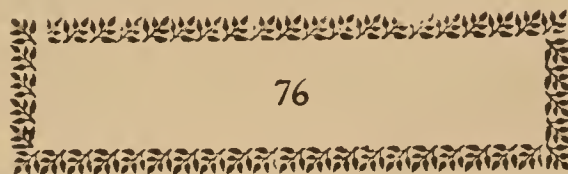


Fig.288.

can man force an absolutely straight line upon nature. On the contrary it is wrong to go to the other extreme, or to any extreme; for the medium course is the best at all times. The very decided curve on the right of the lines is as wrong as the lack of curve on the left end of the group. This error is assumed under two conditions; in one, the extra ambition, physically speaking, of the pupil causes a forced position either in the attempt to stand like a stick or else in the opposite attempt to remove the stick-tendency by

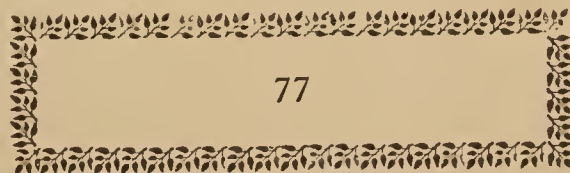
striking a large curve; and, in the other condition, the lack of physical ambition leads to a lolling or lazy position that breaks the body up into parts.

The approach to a straight line is not a sufficient remedy of that fault as it is not a departure from the appearance of such a line. The same may be said of an approach to a decidedly curved line. Of the five, the middle is the best. So in a standing attitude, the rule should be to avoid the appearance of being straight to excess, and the appearance of being curved at all. This is found in the middle or medium line.



Straight lines are graceless.

This is the 76th Ralston Principle. The first ten of these laws are found stated and explained in the book of General Membership; the next sixty-five are presented in Ralston Gardens; making a total of seventy-five. Herein we have the next in order. There are, all told, one thousand Ralston Principles, which are designed to furnish a complete education in every important detail for every man and woman from the humblest to the greatest. These are so valuable that we strongly advise every person to commit the whole thousand to memory as soon as possible. They would fill the storehouse of the mind for future use, enlarging the scope of the intellect and preparing every man or woman who mastered them with the best equipment for the battle of life.



The central line of beauty is the perfect curve of grace.

This is the 77th Ralston Principle. By reference to the lines that are presented a few pages back, it will be seen that the first is merely a straight one, representing nothing but skill of execution. The line next to it is so nearly straight as to be too suggestive of the awkwardness that appears in the first. Then at the other end the fifth line is too much curved, exhibiting the idea of affectation.

The fourth line is near the same in effect, and must for that reason be rejected. There remains but one, and that is the third or middle line. This is neither too suggestive of straightness, nor of affectation; therefore it is called the central line of beauty, and necessarily is the perfect curve of grace. As we follow this study from stage to stage we shall see the application of this middle line in many ways.



Continuous curves are neutral lines of grace.

This is the 78th Ralston Principle. A neutral line of grace is one that is not positively graceless; nor positively graceful. It is often a necessary line; but should be avoided when necessity does not command its use. A straight line also serves in its place to meet the requirements of physical life, or the expression of strength; as when a pugilist strikes a blow, making straight for the object of his aim. The soldier is trained to stand straight; but what woman or man would look well entering a room or holding a position in such a line? His motions, his salutes, his attitudes are as straight and as graceless as it is possible to make them; because he stands for the physical and not for the beautiful. This is not a representation of the neutral, for it not only does not appeal to the sense of enjoyment but actually repels it.

The central line of beauty is a positive expression of grace. Between this and the straight line is the continuous curve, which is neither graceless nor graceful. Any part of a circle may be taken to illustrate the appearance of this line. Or it may be pictured by the arm held in a position that is not straight, and also that is not broken in three directions. Or it may be shown by the body as when the hip is projected to the front and the head is thrown back; or the hip is projected to the back and the head is thrown to the front; or the hip is in any oblique advance and the head in any opposite oblique retirement.

By reference to some of the figures already given it will be seen that these various laws are illustrated in the lines of the body. In Figure 285 the approach to a straight line is seen; in Figure 288 an exaggerated curve is seen, which indicates affectation; in Figure 287 an approach to this exaggeration is presented;

while Figure 286 shows the central line of beauty in the perfect curve of grace. In order to know what the body and its parts may accomplish, take a standing position so as to leave both arms free; then raise them in front of the shoulders in straight lines. Now vary this by repeating Figure 288, the opposite extreme of a straight line. Then give the approach to it as in Figure 287; and finally reproduce 286, the central line of beauty in the perfect curve of grace. This will prepare us to consider the next principle.



79

Affectation is the excess of grace.

This is the 79th Ralston Principle. By excess of grace need not mean too much grace; but rather a passing beyond that moderate middle ground of action and attitude where absence does not mar the sight, and too much presence does not protrude itself. The naturally awkward person is one who never gave thought to grace; he may have seen it in others, but did not know its nature, nor realized that it might fit him as well were he to seek its adoption. He, therefore, has never paid attention to the culture of the body as a physical machine capable of defining lines of beauty. But when a person has seen grace in others, has thought about it and learned of its advantages in beautifying the personality, he is very sure to make efforts at reproducing these traits in himself. If his skill of judgment is not of the highest order, he will overdo the practice, and carry this overdoing into his intercourse with others.

He may notice the stiffness and straightness of the soldier, and of the awkward country fellow; he may compare with them the gentlemen who are easy and graceful; and, taking his cue from the latter, he will do as they do, driving out the stiff, straight lines by an indulgence in the excessive yielding of the body. In Figure 291, this excess is made as strong as possible for two reasons; first to show the three directions into which the body really breaks when departing from the straight line of Figure 289; and, second, to overdo the excess of the attitude so that one who sees it will not easily be tempted to imitate it. Figure 290 is the central line of beauty, for the reason that it avoids the straightness of 289, and the excess of 291. Yet in order to get the moderate

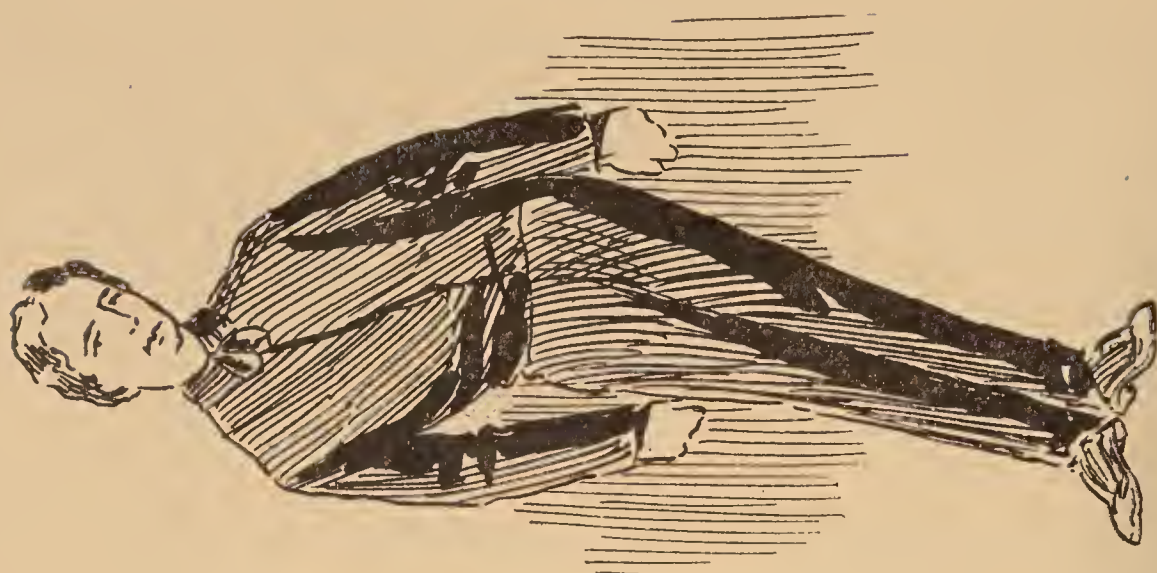


Fig. 291



Fig. 290.

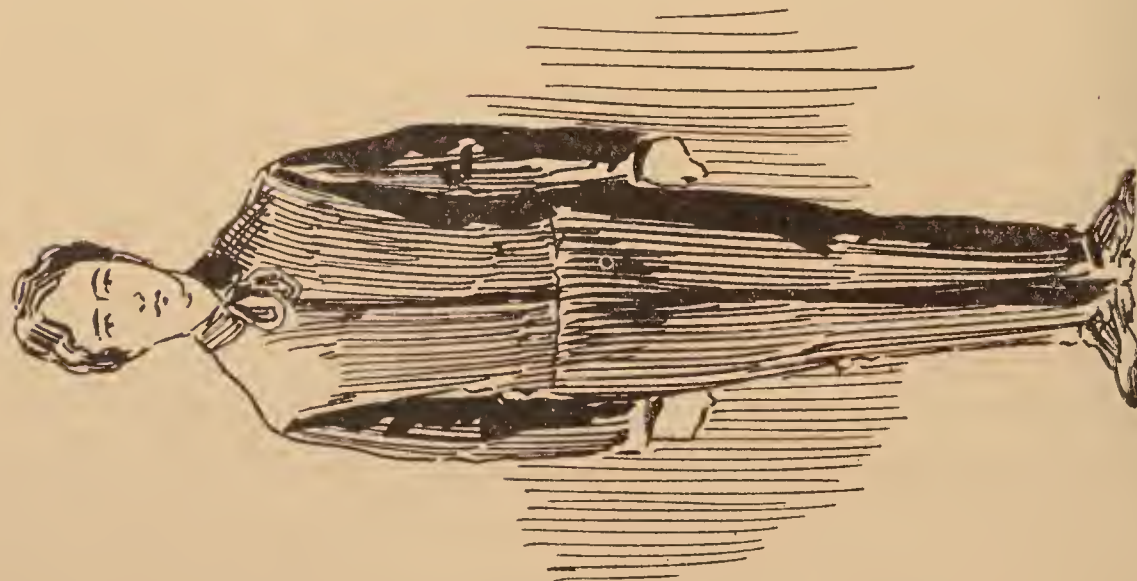


Fig. 289.

middle bearing of 290, it is really necessary to practice the excess of 291 until the body is made flexible, and can be readily broken into three parts having three general directions.



Oppositions are the highest types of grace.

This is the 80th Ralston Principle. The law herein contained is very hard to explain, and a little time must be taken to make it clearly understood. The idea of an opposite is something that not only differs from something else, but also differs from it by the presentation of a balance or contrast. White is the opposite of black; white brown is merely different from black. Light is the opposite of darkness, but twilight is merely different from darkness and is not its opposite. A step forward is the opposite of a step backward; but a step to one side is not the opposite of either, although differing from both. If you will look at Figure 289 you will see that it presents no suggestion of an opposition; but 291 shows that the hip is projected to one side, while the shoulders are projected to the other side; thus describing an opposition although it is much overdone. The hips and shoulders are in opposition to each other.

Then in the same picture, Figure 291, the shoulders are held to one side and the head to the other. This establishes another opposition, making two in the body; yet they harmonize with each other and at the same time prepare the way for the central line of beauty as in Figure 290, by being toned down. Now if the hip had been projected to the front while the shoulders were held to the other side as seen, the result would have been a contortion; and the same would be true if the head had been thrown forward or back with the shoulders to the right or left. In order to make the true opposition the parts of the body must assume opposite directions; especially if they are contiguous. Thus it would not do for the shoulders and hips to project in the same direction; nor for the head and shoulders to do likewise; but it would do for the hips and head to be carried in the same direction, for they are not contiguous, as the shoulders come in between. It is helpful to practice before a full length mirror where these attitudes may be seen as they are executed.



Fig. 292



Fig. 293.



Fig. 294.



Fig. 295.



Fig. 296.



Fig. 297.



Parallelisms are graceless.

This is the 81st Ralston Principle. Look at Figures 292 to 297 and see if you can catch the meaning of this law. To be graceless may include everything that is positively lacking in grace, and everything that is awkward. A straight line to most eyes is awkward; to some it is merely the absence of grace, as it stands for strength rather than beauty. A parallelism has been described by some as the lack of oppositions; but that definition will not bear analysis. A straight line is the lack of oppositions, yet it prevents no parallelism. By the latter word is meant the resemblance of two parts of the body in action or attitude where an opposition is possible. If they are contiguous they can always be taken out of a parallelism.

The body may be said to be divided into three parts the lower or physical is that from the hips to the ground, or the total realm of the legs; the second is the emotional, or that which extends from the hips to the neck; and the third is the intellectual, or the neck and head. If the legs are inclined in a certain direction, and the torso or trunk leans also in the same direction, there is a parallelism, as may be seen by observing the legs and torso of any of the positions from Figure 292 to 297. In the first of these, the legs and torso are both inclined to the person's left, making a parallelism of the two parts of the body. The word does not signify a parallel in geometry; but a likeness or resemblance of position or attitude. A parallel case is one that is similar to another. In such sense we use the word.

Not only is the middle division of the body, the trunk or torso, inclined in the same direction as the legs, but the head is also so inclined, making a second parallelism. The head might be inclined with the legs and not make a parallelism, for these divisions of the body are not contiguous. We then speak of all the attitudes in Figures 292 to 297 as double parallelisms. In 292 the body in all its three divisions is inclined in the same direction, namely to the person's left; in 293 it has the same fault of a total inclination to the person's right; and in 294 the body is pitched forward, which is a very common fault. There is no doubt that

the forward support is the best, if it could be made in the central line of beauty, as seen under the 77th Ralston Principle. To accomplish this it would be necessary to break the body by inclining the hip forward, the shoulders back, and the head either forward, normal or back as its use may indicate; but the chief parallelism is removed when the hip seeks one direction and the shoulders an opposite direction. In Figures 296 and 297 are seen the spread positions of the feet, which allow the inclination to be made greater. This fault is not only common but is universal among young folks, especially when they speak, or stand up to exercise; and more than ninety per cent. of adults are addicted to the swaying fault. The illustrations look excessive for the reason that we do not see persons fixed in either extreme; and their swaying tends to destroy the effect of the exaggeration. Let us compare this condition with others under subsequent laws.



Forward oppositions are the most vital attitudes of the body.

This is the 82d Ralston Principle. Much of its value may be learned from casual remarks just made. To stand on the heels is barbarous, both in a physical and esthetic sense. Look at the extremely awkward poise in Figure 295; a condition that is somewhat relieved by the better parallelisms of Figure 294. Many singers and speakers stand in the latter position, for the reason that they have discovered or have been told that the voice comes out more readily in a forward poise, has a clearer sound and a more vital ring; all of which is true, but may be accounted for by the fact that the throat naturally opens and lets the voice out when the weight is taken from the heels. The forward inclination causes the head to seek an entirely different balance, which can be accomplished only by raising the chin, which of itself always opens the throat. When the weight is sustained on the heels, the head seeks a balance to suit that support, the chin is drawn in and the throat closes, causing the voice to fight its way against a continual obstruction.

Then the chest seeks a new balance when the poise is forward; for it instinctively rises, coming up and forward little by

little until the whole frame is more symmetrical and vital. The organs of life within are carried higher and under a better tension, thus feeding them with a larger fund of nutrition day after day until health is found returning fast. In the practice of hygiene it is the quickest of all ways to get health; and the best combination known is the forward poise and the upward carriage of the inward organs, the lung cavity, the heart, the diaphragm, the stomach, liver and viscera. We believe the problem of health may be solved at this one point.



The body is best supported on the balls of the feet.

This is the 83d Ralston Principle. The foot may be said to have three divisions by which the weight may be sustained. The first of these is the heel, a place of support that can never be used without danger to the health, the nervous system and the appearance. The second of these is the ball of the foot; and the third is the tip or the toe of the foot. By a few experiments in standing you may readily ascertain the use of these three parts. For example, stand on the heels; then change the attitude in various ways, keeping the weight on the rear third of the foot; then walk on the heels. This is common to nearly all humanity; for which reason awkwardness is as common.

Now place the weight on the balls of the feet, keeping the heels always on the floor without using them. This is the mean between two extremes. Stand this way for a while, and compare your degree of weariness now with that attendant upon the feeling that ensues after using the heels. Then assume various attitudes in all of which the weight is kept on the balls of the feet, or the ball of one foot, while the heels still touch the floor. After this walk about, applying the same law of support. It will be seen that every exercise so taken, every movement, attitude and step will keep the body always tending toward better grace; while the heel support will tend the other way. Then pitch the weight forward to the toes, or tips of the feet. In doing so you will observe that the heels must now be raised. This is an attitude that would be affected if assumed as a habit; but is useful in teaching poise and in certain

kinds of dancing. It also has its place in the exercise work of physical training.



A graceful attitude requires a small base of support.

This is the 84th Ralston Principle. We must always distinguish between what is intended to be graceful and what is required for strength. Then there is a third class which includes the combination of both. It is often true that the union of strength and grace is the best presentation of the latter, as may be seen by examining some of the most effective movements in the exercises of physical culture on the preceding pages in the earlier part of this volume. The weaker the body the greater must be its base of support, as will be observed in Figures 299, 300, and 301. A sick man spreads his feet widely apart in order to avoid losing his balance. The same is true of a drunken fellow. Also it may be seen that faintness causes the feet to take large attitudes, in the effort through staggering to prevent a fall.

A glance at Figure 298 will reveal the narrow base of support which is maintained by holding the feet close together; but while one law of grace is being sought, another is being badly broken. In 298 there is a double parallelism. In the first place the feet are both equally advanced, which is a parallelism of position. In the second place both feet point in the same direction, which is thus called a parallelism of direction. In Figure 299 both of these faults are still maintained, in spite of the fact that the base has been enlarged. In Figure 300 one parallelism has been overcome; the feet no longer point straight ahead, but are made to assume opposite directions; thus turning the parallelism into an opposition which all graceful persons seek to do. Figure 301 illustrates the effect of a broad base. Figure 304 is a common fault as to one foot; but what looks bad in one looks worse in both, so the double effect is pictured. You will very often see persons stand with one foot slightly turned in, and the other straight ahead; a combination of 298 and 304.

A brief comparative study will serve some purpose at this stage. We have spoken of the double parallelism in Figure

298, as well as the same repeated in Figure 299 with a slightly increased base. One of these parallelisms was removed in Figure 300,

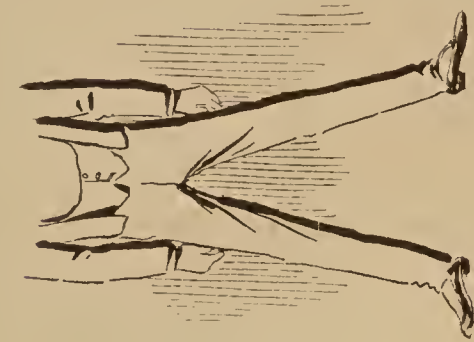


Fig. 301.



Fig. 305

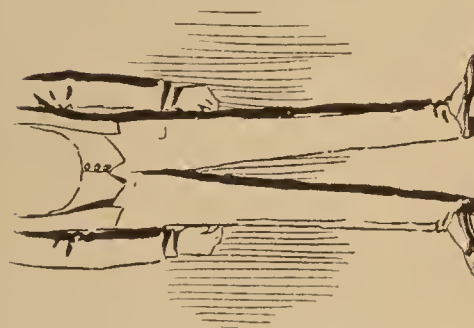


Fig. 300.

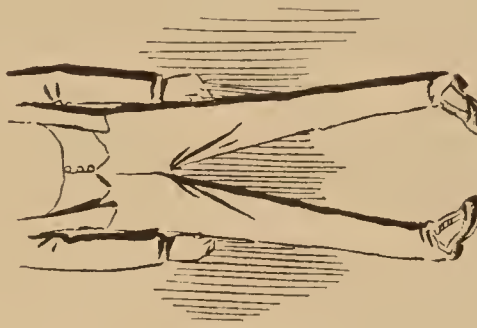


Fig. 304



Fig. 299.

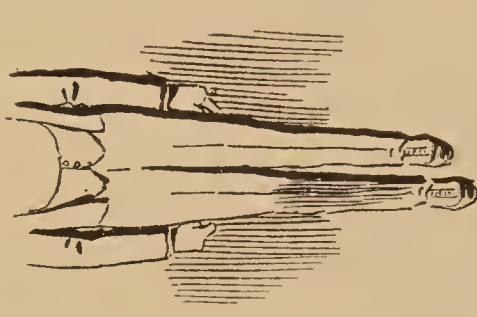


Fig. 303.

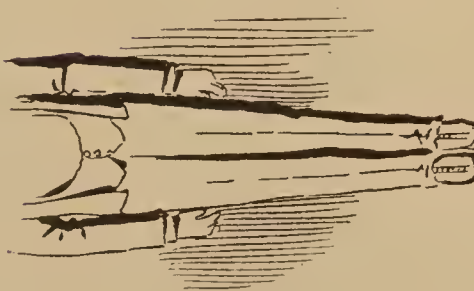


Fig. 298.



Fig. 302

but the other remained. In Figure 303 we see the one that was removed, while the fault of position is now eradicated. In Figure 305 both of these parallelisms have disappeared, and the base is

reduced to a small area. Here is the acme of grace in a standing attitude. It is not the best position for the exhibition of strength; as that is another consideration.



85

Successions are flowing movements of grace.

This is the 85th Ralston Principle. A succession is a sequence of action that would become a parallelism were the parts made at the same time. Thus to advance the shoulder and the arm may be either one or the other as the question of time in the performance may determine. These statements are very technical, no doubt, but they are of the highest importance and should be studied with patience. It is very difficult to make a succession that would not be graceful if the same be done spontaneously. An awkward person may make a succession by forcing it; but when it comes after practice as a habit it is necessarily a flowing movement of grace.

Some so-called successions are not properly entitled to that name; as when the arm is broken into its parts and each follows the other as in the whip lash action; the shoulder starting the movement, then the elbow, then the wrist, palm and fingers. The true succession is made when the arm and body advance, but one after the other; or when the arm and torso are moved in the same direction; or the arm and shoulder; or the head and body, head and arm, head and shoulder; and so on. With the laws already presented there is material for a pleasant study of the habits of the body. Let us first look at Figure 309. Ask any person, however unlearned in art or grace, if it is an attractive position, and the answer will be at once in the negative. The arm has been extended out laterally to the person's left, and looks as if it had pulled the body out of a plumb line; as it really has. The same fault is observable in Figure 310, as a right lateral parallelism, and in Figure 307 as a front action of the same kind. In Figure 308 a continuous curve is depicted as a breach of the 78th Ralston Principle.

The two attitudes that seem to please most are those in Figures 306 and 311. In the latter the continuous curve is destroyed by the advance of the knee; and to that extent is an improvement over 308; but the shoulders and arm depict a parallelism

of attitude that may represent strength, and in so doing may be a necessity. Try to assume the same attitude, but see to it that the



Fig. 306.



Fig. 307



Fig. 308.



FIG 309



Fig. 310



Fig. 311

shoulder and the arm are not advanced simultaneously. If you study 306 you will find that there is no breach of any law of

grace; the legs and torso make an opposition of direction, as do the torso and head. The shoulder is not pulled forward by the plunging out of the arm, but stands back and holds the body in symmetrical shape. This, then, is the typical attitude of grace.



Fig. 312.



Fig. 313.



Fig. 314.



Fig. 315.



Fig. 316.



Fig. 317.



86

Parallelisms of action should be turned into successions.

This is the 86th Ralston Principle. It provides the remedy whereby the faults under the 81st Principle may be transformed into the flowing movements of grace under the 85th Principle. A study of the various figures from 312 to 317 will disclose what is meant by the faults and the merits which are involved in the laws mentioned. In Figure 312 it is seen that the head and the right arm may move forward; if done simultaneously the effect would be the height of awkwardness; yet we often see that fault committed by speakers. Now the same attitude may be made by another parallelism; that of lowering the head and the hand at the same time. To turn it into a succession, the head and hand should not be lowered simultaneously but one after the other. Which should precede?



87

The heavier should lead the lighter.

This is the 87th Ralston Principle. The solution of this law is not easy at first. The three parts of the body involved in Figure 312 are the chest, the arm and the head. Whichever is the heaviest must properly lead. We know that the chest is heavier than the head and also than the arm; so it is settled that as between an advance of the chest and head the chest must lead, and as between a lowering of the chest and head the chest must lead. But is the head heavier than the arm, or is the latter heavier than the former. Actual weight need not determine the matter for the analysis of the movements of graceful and even strongly graceful persons, shows that the head follows closely after the chest, and always precedes the action of the arm when successions are possible.

If a feather be thrown into the air and left to fall by its own weight, the quill end will lead in the upward course, then turn and lead as it begins to descend. In graceful and flowing movements of the arm and hand, the wrist always leads the fingers, by

operation of the same law. The hip is the heavier part of the body, and leads that whenever the whole body is involved in graceful motion. Therefore the hip would lead the chest if both were to move. In Figure 312 the hip is not active, for no steps are taken, nor is there any movement except from the waist upward. It is quite difficult for a graceless person to execute a motion of chest and head whereby the former leads, for the succession is slight; yet the artist feels and knows its existence.

Instead of the forward action shown in Figure 312, a lateral movement is seen in 313. The advance of the knee prevents a continuous curve under Principle 78. The chest, head and arm are all carried to the right, and all are somewhat lowered, making two sets of successions. In these the action should be imitated by the chest, then flow to the head, and finally appear in the arm. In Figure 314 the same action is pictured on the opposite side of the body. In 315 a variation is seen in the fixed depression of the two arms, the chest and the head. We here have another problem. Shall the law that declared that the feet should not be evenly advanced nor point in the same direction, apply also to the use of the hands? No. The arms are not contiguous. As the head and hip stand with each other in an opposition of position, as the feet and the shoulders should likewise stand in harmony, so the hands, being separated by the torso, may work together without effecting a parallelism. Thus when both hands are advanced they make an opposition, even if exactly the same in direction and degree of advancement.



Successions should overlap each other.

This is the 88th Ralston Principle. The word overlap means that one action should begin before its preceding action has ceased. A flowing movement of grace would be neither graceful nor flowing if the parts of the action were connected at their respective ends. Figure 315 furnishes an excellent means of illustration and practice. Stand up. Lower the chest, head and arms with fists clinched; allow all to drop simultaneously. Then stand erect again, bringing the hands, chest and head up, and place the hands upon each other over the chest. Now drop them and all simultaneously.

Repeat several times until you realize the awkwardness of the action. This practice develops parallelisms. To produce grace out of them they should be turned into successions under the 86th Principle.

The next step in the practice is to make successions that are not overlapping. This is done by dropping the chest first, for that is the heaviest; then, when the chest is as low down as it is to be placed, let the head fall; and finally let the hands fall from their position on the chest. Here the succession is established. Repeat fifty times, if you have any difficulty in making the movements; for if once well executed in this practice a certain control will have been acquired over the whole body. Yet the result is far from graceful, for the 88th Principle tells us that successions should overlap each other. This is accomplished by realizing the range of action given to each part to be moved; by knowing how far the chest will fall, how far the head will fall, and how far the hands will fall. Now it is certain that the hands will fall fully four times the distance of the chest, and the latter fully twice the distance of the head, not counting that range of movement which the head must necessarily take in accompanying the fall of the chest. When the chest has begun its movement, the head should begin its fall, so that the former will have come to the end of its descent ere the head ceases its actual fall. Thus one flows into the other. Then the hands should begin to fall before the head ceases falling. All this must be worked out by constantly repeated practice until you have a clear knowledge of every part of each movement.



Oppositions of action should be simultaneous.

This is the 89th Ralston Principle. There are many illustrations of each of the laws of grace thus far given; and it is probable that the body is capable of hundreds of oppositions in one way and another. By reference to Figures 316 and 317, you will see a very common and very simple opposition, which is made by advancing the body while carrying the uplifted hand slightly backward. If the hand were to be uplifted while the head was bowed, another

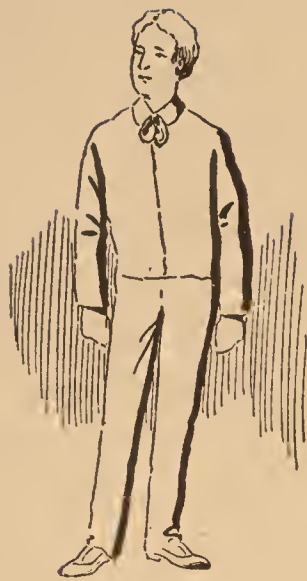


Fig. 318.



Fig. 319.



Fig. 320.



Fig. 321.



Fig. 322.



Fig. 323.

opposition would be produced; and others would be made by elevating the head while lowering the arm; leaning to one side while extending the arm to the other; and so on. The most effective and beautiful oppositions are always quiet and gentle; as when, in the minuet, the head is inclined to the right side and the face is turned to the left side; and the reverse of this.

Action and attitude require the same laws of grace. The Figures from 318 to 323 are attitudes; the taking of which may be exaggerated as they are done in the illustrations. Thus 320 is excessive, and would quickly be recognized as a species of affectation; and 321 is merely the reverse of it. The attitudes of 318 and 319 are lateral oppositions, while those of 320 and 321 are obliquely made, the directions being right and left oblique front relatively with the presentation of the chest. The most difficult of all oppositions are those of the **right** oblique backward as seen in 322, and of the left oblique backward as seen in 323. These are used very frequently in resting attitudes, although not in the excess as shown in the illustrations. If you wish to possess a supple, flexible, graceful body, especially for its highest social uses, and for beauty of action in the great minuet, be sure to practice repeatedly all the following oppositions:

1. Hip leading directly front, weight on the right foot forward.
2. Hip leading directly front, weight on the left foot forward.
3. Hip to right oblique front.
4. Hip to left oblique front.
5. Hip to right lateral.
6. Hip to left lateral.
7. Hip to right oblique backward.
8. Hip to left oblique backward.

Whenever the hip takes a certain direction the head should take the same direction, and the shoulders should take one exactly opposite. Later on when these movements are easily acquired, the lateral and the oblique oppositions should be taken with the head inclining with the direction of the hip, but the face turned to the other side of the body. This prepares the way for the minuet. If you wish to acquire the most graceful control of the body for all beautiful uses, free from affectation, you should master all the principles which are presented in this part of the present vol-

ume. But it is absolutely impossible to execute the minuet, unless you do master them in advance of taking up that grand exercise.



The hip should lead the action of the body.

This is the 90th Ralston Principle. It is the heavier and more massive part of the body. Except when a person is too much developed abnormally, it is of the highest importance in grace to start all movements by a leading action of the hips; of course not in a prominent manner, but by a sufficient advance to prevent a unified action of all the body from the feet to the shoulders. The hips were made to use, not to ignore even in walking; and certainly not in dancing or other graceful employment, and the neglect of their flexibility or of their existence even, will render the body as stiff as if there were no hips. The most beautiful walking is that in which the middle of the body shows the first evidence of advance in each step. In dancing the best movements are those wherein the hip leads; if the weight is carried to the left by a step on the left foot, the hip should overlean in that direction; if to the right, then the hip should lean to the right; if in front the same law should hold good, and so on.

These advances of the hip are shown in Figures 324, 325, 326, 327, 330 and 331; although the feet positions change. In 324 the feet are held closely together, and the hip leads to the direction of the person's right side; while the left is favored in 325. Now let the right foot move to a forward position as seen in 326, and the hip should lead the entire body in the same direction. If the step had been taken with the left foot, the hip should have lead as in 327. These illustrations are turned about and are slightly exaggerated in order that the nature of the advance might be better seen.

The various kinds of base are shown in Figures 328, 329, 330 and 331; and those may be compared with those above. Under the 84th Principle, we are told that a graceful attitude requires a small base of support. In Figures 299, 300 and 301, we see the effect of broad bases of support. In 324 the base is so compressed that the weight is thrown upon both feet; and this is not

the best, although it is graceful to some degree. The feet are not advanced to the same line, as the heel of the person's left foot is



Fig. 327.

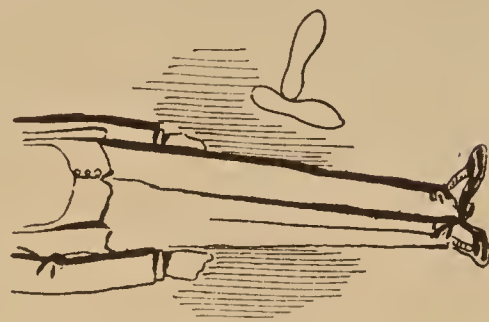


Fig. 331.

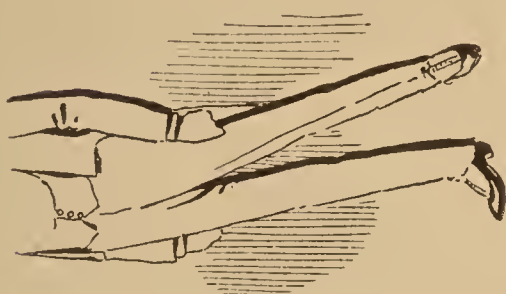


Fig. 326.

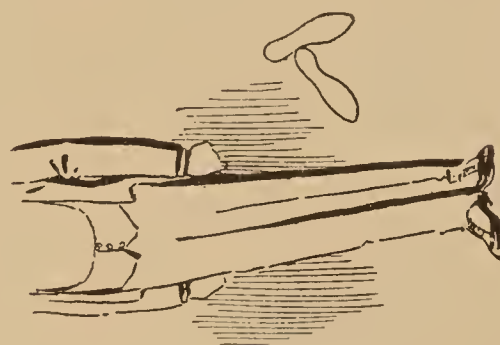


Fig. 330.



Fig. 325.



Fig. 329.



Fig. 324.



Fig. 328.

near the instep of the right, thus preventing a parallelism. Figures 326 and 327 are correct attitudes; the base being narrowed to one

foot and all the weight of the body being supported thereon. In 328 the heels are together in what is sometimes called the military position, which is necessary for drill in exercises, but it is not the best for graceful effect. In 330 and 331 the base is again too compressed as the feet are so close as to cause a necessity for keeping the weight on both feet. These are at right angles. The position is necessary for the gentleman's bow in the minuet.



Poise is the perfect support of the body.

This is the 91st Ralston Principle. If a person seeks the best presence it must begin in the mastery of poise. If he seeks ease of standing and of motion, it must come from the same law of support. To allow the center of gravity to take care of itself always results in a loss of balance at every opportunity. To prevent this, it is important to learn the art of recognizing the presence of the center of gravity, and to keep it directly over the main line of support. There are many useful exercises that are used in culture of this kind, one of which may be considered the first, as it is the simplest. Take a step and stop with the weight on one foot only; if the poise is not good, it will be impossible to maintain the balance. Let us look further and see how we may learn to control the center of gravity.



The Greek line of support is the key to poise.

This is the 92d Ralston Principle. The word Greek is used, as their line was the familiar vertical or plumb line of stationary attitudes in old Greek art, and is a true solution to all normal support. There are two ways of stating it. In the first one, a line carried from the nape of the neck to the heel of the foot that sustained the entire weight of the body should prove to be a vertical one, and not inclined out of its perpendicular. Although the line strikes the heel, the weight should be placed on the ball of the foot, or principally upon the ball.

There is a better way of presenting the same law ; and that is by saying that the center of the torso should rest directly over the ball of the foot that sustains the weight. To the artist the vertical line from the nape of the neck seems easier to get at. Now suppose the weight to be upon the left foot retired ; that is behind the right foot ; stand in such a way as to bring the lower part of the neck directly over the heel of that foot ; and the result will be that the hip will have to assume a correct opposition in order to effect this attitude. Step forward on the right foot, and let the heel of that foot come directly under the nape of the neck, which is the back part just under the base of the lower brain. When the weight is on both feet equally the vertical line should strike the ground at a point half way between the two. When part of the weight is on one foot and a greater or less part is on the other, the vertical line should strike the ground that much nearer the foot which sustains the greater part of the weight.

From an examination of these attitudes it will be seen that when the nape of the neck passes beyond the vertical line of the heel, the body must be either in a parallelism or in a continuous curve. Look at all the figures given in this part of the book and see what of them are in conformity with the present law ; and what are not. There is a decided breach of poise in each of the illustrations shown in Figures 292 to 297 ; also in Figures 307, 308, 309 and 310 ; while the law is well maintained in 306 and 311. By referring back to the exercises in physical culture, in the early part of this book, it will be seen that the principle of poise is always observed ; although those movements are designed to teach strength rather than grace. In some of them the weight is on the ball, or on the toe with the heel raised, and this advances the line of support an inch or two. In 80 the body is in the act of changing its weight ; and in 81 and 82 the running attitude requires the upper half of the body to be pitched to suit the balance of the raised foot. The only attitudes that depart from this law are those that have relationship to some position or movement of convenience or support ; unless they depict character or a faulty condition. In stooping to pick up something it is possible to maintain the law while it is common to break it. In leaning, fainting, using a cane or implement of any kind, the laws of grace are departed from in ordinary practice ; yet in most cases this need not be so. Decrepitude and the faults of age are ungraceful, and should be studiously avoided.

The centers of head, neck and chest should coincide.

This is the 93d Ralston Principle; and it is, perhaps, a very technical way of stating a simple law; but its technicality saves a long description that would be more verbiage than the principle requires. The centers are of the head, neck and chest. Imagine a line to pass directly through the trunk of the body from the middle of the stomach to the very heart of the neck, and as far from the front, back and sides as it is possible to get it; this would show what is meant by the center of the chest. You must keep the mind alert so as to recognize what is meant by this lowest of the three centers, and think of that part of the line which is midway between the stomach and neck, say in the middle chest.

The next center is of the neck, and here we must take the lower part of the neck as the plane of reckoning. Its use is merely that of fixing the union of the highest center with the lowest, as we shall presently see. The head center is now taken at the base, where it joins the top of the neck, and is about under the roots of the tongue. If you can fix these three centers clearly in your mind, you may begin to put them into execution. In the first place it is not enough that the head center be directly over the chest center, for this might be done and form a broken, slanted or curved line, as may be seen by swinging the shoulders out of an even carriage. The middle or neck center must be in the line midway between the others, so as to avoid the defect referred to. If the head center is carried out of the vertical line so that it does not coincide with the others, the neck is craned, it leans forward as in age or in awkwardness, or else assumes a backward, or lateral inclination. This principle does not interfere with the dramatic attitudes of the head, as will be seen by experiment. Here we have an explanation of the reason why some persons are ungainly and awkward, although they add daintiness and skill to the execution of every movement. A head poise is beautiful, even in a plain person, if these simple laws are observed; and, on the contrary, the most bewitching individual can count nothing for beauty if the laws are broken.

The shoulders should be centrally poised.

This is the 94th Ralston Principle. There are several wrong positions that the shoulders assume without your intention or even your consciousness. The most common of these is the forward leaning, which is due to either habit or weak chest; and in this case they are carried in front of their normal poise. Then the careless teacher so often instructs pupils to throw the shoulders back that the counter deformity is at once seen; they are carried behind their normal poise. The true position is midway between these two extremes. Then another fault is that of raising the shoulders, either in breathing, under the supposition that air is assisted in by such an abnormal action, or in the belief that high shoulders add to the height or impressive strength of the body; while the fact is, they make a person look ridiculous. Avoid all these unnatural positions; keep the shoulders down.

The vital organs should be raised.

This is the 95th Ralston Principle. It is stated in brief language; as, in the attempt to explain it fully, a large description would follow. What we mean by the vital organs includes the lungs, the heart, the diaphragm, the stomach, liver and all surrounding and connecting parts. They are held in place by muscles or by the aid of muscles. That the entire mass may fall is proved by the fact that it is the most common of all errors in the management of the body. Generally the chest collapses, owing to the frequency of the sitting position. When the chest frame is raised the vital organs may or may not be elevated at the same time. It is an easy experiment to hold the chest frame up and allow the vital organs to fall. Health and good presence require that the mass be carried high at all times, and as a habit.

The chest should be energized.

This is the 96th Ralston Principle. By the word energize we mean a muscular vitality; and this is next in value to a magnetic vitality. To appear well, to possess a properly shaped body, to carry the frame in its easiest and most impressive attitude, it is necessary that the chest frame, the seat of the personality, should be developed not only to assume that position which nature intended for it, but to retain as a fixed habit its utmost life. This cannot be done by temporarily inflating it and carrying it about like a puffed toad. The forward position should never be excessive. It does not indicate anything of value unless it is natural and habitual. This may be increased and added to day by day all through life. But the chief essential of the present principle is something more than the position of the chest frame; it includes the energizing or life-force in itself. This always occurs when the feelings are buoyant, and it can be made to come by training and education. It is to the lungs and heart what glame is to the hands and arms. So valuable is the practice of energizing the chest that, if it is done in the fresh outdoor air it will quickly revolutionize the health as well as give a splendid bearing to the body.

Studied repose absorbs all useless motions.

This is the 97th Ralston Principle. By studied repose is meant that which of itself carries the idea of deliberate self-control; and this is as much art as if it were nonchalant and had the appearance of abandon. Small motions are ungraceful; they give rise to nervousness in the individual, and excite feelings of nervousness in others who watch the individual. The eye delights to rest upon that which is free from the wear and tear of fretful unrest. But the loss of prestige in the person is of more consequence, and the real damage is done to the good presence of the man or woman who lacks the calmness of studied repose. It need not lessen the activity

of the general body, or any of its parts, in any practice, or exercise, or performance; but it does lead to directness, and calls in all the ragged strands that mar the strength of the cable. Let useless motions be eliminated.



Perfect walking maintains the poise of all the centres.

This is the 98th Ralston Principle. When the head leans forward, it is in front of its center; when it is tipped backward it is behind its center; and when it is to the right or left, it departs from its center. If the chest is bowed or bent downward, its center is carried out of poise; if it is swung backward, the same fault appears; if the shoulders sway to the right on a right foot step, or to the left on a left foot step, the fault is repeated. Under this principle the poise of all the centers must be maintained, from the central support on the ball of each foot that in turn sustains the full weight of the body, to the center of the chest, of the neck and of the head. All this may be constantly observed, yet keep the body pliable, flexible and in its best attitudes of opposition. Thus the hip oppositions are really necessary to bring the center of the torso over the ball of the foot. Poise should be absolutely perfect on either foot, so that when a step is taken it carries the full weight of the body as easily as if it were an exhibition of fixed repose.



The face should be uplifted.

This is the 99th Ralston Principle. As it is so briefly stated, a full explanation is necessary. We do not mean to throw the face upward toward the sky or ceiling, nor to thrust the chin forward and crane the neck, nor to have the head assume the carriage of haughtiness and arrogance; but we do mean that the face should not reflect the earth, the ground, the low things of life, nor even the associate things of life. It ought to be so far uplifted that it re-

flects the horizon of the sky, just above the landscape of earth. Old age is first marked in its approach by the habit of groping toward the ground, looking to the soil, and seemingly unaware of the beauties and splendors above. The trees, the shrubbery, the sky and all its glories are full of attractions that should lift the mind out of the commonplace ruts of life. Then hope turns the face upward, while gloom depresses it.

To understand this principle it is necessary to think it out first, and then to put it into practice. The face may be described as having five attitudes of elevation; the first is that which places it on an average of a parallel with the vertical wall of a room; the second depresses it slightly below the first attitude; the third lowers it still more; the fourth uplifts it very slightly above the first; and the fifth elevates very much. It is the fourth attitude that is referred to in our present principle; in which the face is but slightly uplifted from a direct frontward presentation; just enough to uplift it in the smallest degree. This departure from what is ordinarily met with in daily life, is a refreshing change for the better. The villain looks down, the honest man looks up. The morbid soul looks down; the calm and beautiful character uplifts the face. The change is not enough to be considered pronounced; but its effect, quiet though it be, is full of attraction and charm; and, whether in the drawing room, in the dance, in exercise, in business, or on the street, the appearance of the whole body is enhanced by this delightful improvement in the graceful carriage of the head.



100

Culture is a mean between two extremes.

This is the 100th Ralston Principle. The middle ground is the vantage realm of all art. In the study of grace if the principles are violated by their non-existence in the individual, the result is awkwardness; and, if they are adopted by artifice, nothing is acquired but affectation either with or without grace, and this is less wholesome than blunt, honest awkwardness. Avoid extremes both ways. In the 76th Principle we see that straight lines are the extreme of crudeness; yet the over-curve is the other extreme of affectation. In the 83d Principle the middle ground is seen in the

support of the body; yet the clumsy person goes to the extreme of using the heel for sustaining and carrying the weight, while the affected person uses the other extreme of a forward action on the toes. In the 90th Principle we learn that the absence of the hip



Fig. 333.



Fig. 335.



Fig. 332.



Fig. 334

opposition is awkwardness; while its over-action is affectation; and the middle ground, or mean, is culture. This law follows everywhere and in every direction. To be cultivated, it is necessary to avoid the extremes that tempt us either way.

To see the delicacy with which this law may manifest itself look at the illustrations shown in Figures 332 to 343, applying the rules of grace to the arm and hand, where they need their most practical exemplification. In 332 the easy carriage of the arm is seen; being extended without straightness to make it awkward, or an over-curve to make it affected. It follows the law of the 77th Principle, which says that the central line of beauty is the perfect curve of grace. The hand and the two parts of the arm are in three opposite directions; the hand dipping just enough to prevent a continuous curve. In Figure 333 this condition is made more pronounced by the deeper bending at the elbow; while in 334 a continuous curve is actually presented, leading from the shoulder through the entire length of the arm to the tips of the fingers. In 335 the same breach of grace is shown in a reversed position; the curve running the other way. Of all these attitudes of the arm the only one that is perfectly graceful is seen in Figure 332; although 333 is not ungraceful. These studies may serve in directing the use of the arm in the art of expression, as well as in other ways, for the laws of grace apply everywhere and under all conditions.

The hand is so often employed in the portrayal of refinement that it may be made the subject of a brief study. In the first place, it ought to be understood that the thumb and the four fingers are controlled by muscles of their own, which clearly indicates the purpose of nature to give to each digit its separate action. If you will watch the motion of the crude man or woman you will see that the digits are made to act as though one muscle directed them all. On the contrary the gentler and more graceful individual will recognize the fact that these separate parts have uses of their own, not all united under one operation. An excellent series of exercises may be employed to train these fingers to become flexible.

In the first place the devitalizing or loosening movements are important. These consist in holding the hands so that the fingers may hang down, as limp and free as they can possibly be made. Move the wrist about while the fingers vibrate like so many lifeless strings. Then shake the hands to the right and left, allowing the fingers to dangle like things that lack stiffness. Vary this by shaking the hands forward and backward; then in a circle in one direction, and in a circle in the reverse direction; afterward up and down in a tangled mass. This devitalizes or removes all stiffness. Then pay attention to each finger as though it were a separate mem-

ber. Move the little finger out and back, then forward and return, while the others remain close together, touching each other. Fol-

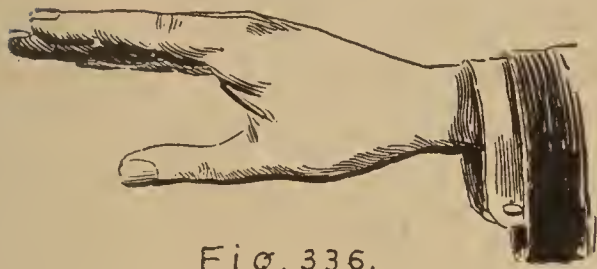


Fig. 336.



Fig. 337.



Fig. 338.



Fig. 339.



Fig. 340.

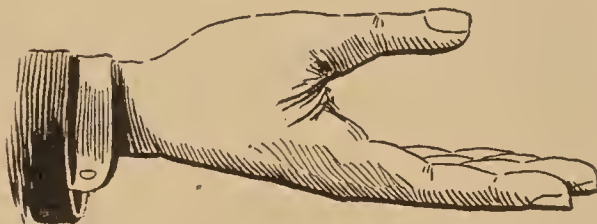


Fig. 341.



Fig. 342.



Fig. 343.

low this in turn by moving the first finger in the same way, then each of the others. Finally split the hand at the fingers so that the first two cling together, and the last two also touch, while the sec-

ond and third separate. Then allow these to touch while the first and fourth separate. In a brief time the hand will become more graceful because of the independent action of the digits.

The awkward part of the hand is found at the knuckles, where the fingers join the back of the hand itself. When this is given any prominence the grace of the whole hand is marred. A line from the wrist to the tips of the fingers should pass the knuckle joints without revealing them as prominent features. In Figure 336 this part is too apparent. Compare the same hand with that of Figure 340, where a sweeping and easy curve is maintained from the wrist to the ends of the fingers. While the difference is but slight, it is very great to the trained eye; and is very much more pronounced in the cases of really awkward persons who rarely ever give the hand its graceful curve. Figure 337 is the same hand turned over; while 341 shows the effect of the slightest change for the better; and 343 presents the best position, as the prominence of the knuckle is entirely subdued. So Figure 342 is a decided improvement over 338; and the two are as nearly alike as it is possible to make them, yet have one crude and the other elegant. The fact is that the ungraceful hands are merely more prominent breaches of the same defects as seen in Figures 336, 337, 338 and 339; and we need not, therefore, present them here. Some teachers believe in sinking the knuckle joints so as to overcome all tendency toward the opposite fault; but that is an extreme that is not really necessary.



SIXTH DEPARTMENT.

The Beautiful Minuet.

Teaching the Most Refined Conduct of the Body.

THE GLORIOUS, the exquisitely dainty and delicately graceful minuet now claims our attention. It has been sometimes mentioned in other books, even under pretence of being taught, but never in any volume, either of dances, steps or other movement, has a single page or line of help been given to any person who needed assistance in this the most exact of all physical arts. Figures, evolutions and other matters have been occasionally published in brief form; but not a word of description or of help has ever been given as to how the steps are taken, how the body is to be handled and what is to be done to develop that ultra degree of grace that is seen in the true experts of this movement. The result is that, when the pleasure is indulged in, a bastard step is taken and all the rest goes to naught.

THE MINUET occupies a realm that is all its own. We mean the true minuet of old and cultured Europe, of the classic days of American elegance that hovered about the rich refinement of our continental aristocracy like the aroma of fragrant flowers in some beautiful garden. We have seen what is called the minuet, and in a dozen different forms, but it was not the minuet, nor didn't bear any genuine resemblance to that beautiful step. On the stage it is frequently paraded and even accepted as such, but few actors have time to learn the true movement, and so they take that which will most easily pass current. We wish to correct the prevailing errors, and to present the minuet as it was danced in Europe and is still danced to-day; although in fact it is not properly called a dance.

The step and all the movements of the body furnish the most difficult combination of action which it is possible for the invention of man to conceive as applied to the human frame. Poise

is more of an essential in the minuet than in any dance; and it is a kind of poise that must be exact to the hair's breadth, or the control of the body is marred to that extent; hence this movement is the greatest known means of physical refinement. But poise is only a beginning. It is doubly taxed by the fact that both feet at times are required to take successive steps on one note of the music; something that never occurs in dancing. Then the free foot in the minuet properly belongs in the air, instead of resting on the floor. See the free foot in Figure 344. This is always difficult and adds to the delicacy of the action.

Among the other advantages may be mentioned the peculiar carriage of the foot. In walking we see the uplifted toes, which too often reveal the soles of the shoes; in dancing the more graceful persons keep the balls of the feet on or near the floor; but the minuet does more than either or both of these, for it teaches the prominence of the instep or arched portion of the foot by which the sole is made to face away from the front. This proves to be of most important advantage to one who seeks the best refinement of the body in its steps whether in the drawing room or elsewhere. Then every drifting change of the poise to the right or the left supports of the body, require an opposition of the hips under the laws of grace. This is never thought of in any other exercise; and certainly never occurs in any modern dance. In fact the most beautiful of dances are far from graceful in a finer sense; and it is solely because of this lack of opposition. Both sexes, for instance, waltz with the body making an obtuse angle at the hips, just as though a big jack-knife were about to shut up. The continuous curves seen on the modern ball-room floor are far from being graceful, and certainly are not likely to give refining influences to the body. They are utterly lacking in the very essentials of grace and ease. Not so in the French and other European methods of the olden days.

DETAILS OF THE MINUET.

While there are many false steps in the so-called minuet, there are but few in fact, and they belong to the original old-time movements, from which no improvement seems to have been possible. We propose to give them here in the utmost exactness of detail. If you wish to cultivate the finest graces of the body, to acquire perfect ease, polish, and that high degree of culture that most readily distinguishes the true lady and the gentleman from the

common exponent of crude affectation, you can find no means of progress so rapid as in the attempt to master the minuet. But you should perfectly master it. To do this you should become familiar with its every detail; and not seek results at a leap. There are so many details that must be fully absorbed, so many little things that are giants in making the grand total, and so much that immediately tends to reform the whole body from the feet to the head, that you should seek victory in one little detail at a time.

In the first place there are eight details, or actions, devoted to the training of the legs in the minuet; and these must be thoroughly understood and correctly performed by an unlimited number of repetitions of each detail. In this way, and in this alone, can the art be well acquired. It must always be remembered that, while these little things are being learned, the whole body is undergoing a rapid change for the better. The eight details are:

1. Poise.
2. Tapping.
3. Forward Step.
4. Recede Step.
5. Forward Glide.
6. Recede Glide.
7. Forward Double.
8. Recede Double.

1. THE POISE.—A glance at Figure 344 will show the body poised on the right foot; with the left raised. The true poise of a gentleman in the minuet is a preparation for a step. He must always take the first step with his left foot; and the lady reverses this, taking her first step with the right. In order that the gentleman may be ready to use the left foot for the first step, he must have no weight upon it. It must be free. His whole body is, therefore, sustained on the right foot; and the left is poised in the air.

Being a right foot poise, leaving the left foot free to take the first step, it is called a gentleman's poise. The lady stands on the left foot and raises the right for poise. The costume is that which we recommend for the modern gentleman indulging in this art.

The free foot in poise must be so raised as to observe three important laws. It must be lifted high, the ankle almost coming to the calf of the leg that sustains the weight of the body. It must also be held forward; not close to the other leg; but as far

in advance as possible. The foot or instep must be arched; and that is done by turning the toes down so that the sole of the shoe is made to face away from the front; so that in fact, a person standing be-



Fig. 344

THE POISE.

hind could see the sole, while a person in front could see only the top of the foot. Nothing is coarser in dancing than the lifting of the toes and thrusting the sole of the shoe forward. The minuet seeks to reverse this. "Poise" is a getting ready. When all are

about to begin, the signal by word of mouth or of the piano should be given; and, instantly, all persons should assume "Poise."

2. TAPPING.—This consists in taking the attitude of "Poise" to begin with, and then beating the accents of the music with the toe of the raised foot. On the first accent the foot comes down to the floor, the toe of the shoe making a slight tap, and the foot is at once raised to the position of poise. On the second accent the same is repeated; and, on the third, it is again repeated, unless the movement calls for a shifting of the action, which is generally the case.

3. FORWARD STEP.—This is merely the putting down of the foot that has been held up in poise. Thus in Figure 344 the left foot is raised; and a forward step would consist in advancing the body the length of an ordinary step and placing all the weight upon it, leaving the right foot in the rear but perfectly free. It is important to remember that the latter should be near the floor, but not on it.

4. RECEDE STEP.—The minuet is peculiar for its constant change of direction; which, if well executed, presents a very beautiful appearance. If you will look again at Figure 344 you will see the attitude of poise. When the body has been advanced by placing the left foot on the floor, with the right foot in the rear and free, this is called a Forward Step. When the right foot moves backward the length of a step, and to its former position of poise as seen in Figure 344, with the full weight upon it, and the left foot held forward as in the beginning, this is called a Recede Step of the right foot. If the right had been advanced, then the left would take the recede step; and so on. In the simplest form of the minuet the forward step and recede step are much used.

5. FORWARD GLIDE.—The best description of this detail of the minuet is that it is a longer step forward than what is termed the forward step. In addition to that, it receives a slight impulse by the rising action of the foot that sustains the weight, leading to a beautiful swing that lends a charm to the movement.

6. RECEDE GLIDE.—This is a long step backward; and what is said in the foregoing paragraph will apply here.

7. FORWARD DOUBLE.—Here the peculiar difficulties of the minuet arise. If you analyze the tapping detail, or that of the forward or the recede step, you will find that a shifting from one side of the body to the other cannot be secured unless a step is lost or one is duplicated. Thus in poise for the gentleman the weight is

on the right foot; the first step is taken on the left, called a forward step, the second is taken on the right by a recede step, and the third on the left by a forward step. Now three details in the minuet, except mere poise, make a half measure; and these steps should so complete the measure that the next or fourth step should reverse it and give the lead to the other foot; but this cannot be done, unless one of the first three steps be omitted or doubled. Let us analyze it and see:

FIRST PRACTICE.—Stand in gentleman's poise. On count one, forward step; on count two, recede step; on count three, forward step; on count four, recede step; on count five, forward step; on count six, recede step. This simply brings the body forward and back on the same foot for each direction; that is, the left foot always goes forward and the right foot always goes back. As a half measure consists of three counts, and a whole measure of six counts; and as the leading foot should change for each half measure; it is wrong to make the six counts as described in this practice. Ladies may analyze the same action by taking ladies' poise at the start; that is the weight is on the left foot and the right foot is raised in front.

SECOND PRACTICE.—This is done, like the first, simply to show the difficulty of adjusting the change of weight. We will now lose a poise. On count one, take forward step on left foot; on count two, step back on right foot; on count three, step forward on left foot; on count four, step forward on right foot; on count five, recede on left foot; on six, forward on right foot; on seven, forward on left foot; on eight, back on right; and so on. This is the stepping minuet; and is affected only by the loss of the poise between counts three and four, and between counts six and seven, and every three thereafter.

THIRD PRACTICE.—“*Forward Double.*”—On count one, after taking gentleman's poise, step forward on left foot and take lady's poise, which is the same as gentleman's second poise; that is, the weight is put on the left foot forward and the right foot is brought in front of that and held in a raised position, as seen in Figure 363. The action of passing from gentleman's poise to lady's poise on one count requires a double step. Now try it. Commence in the attitude of gentleman's poise, which has the weight on the right foot; on count one pass to the attitude of lady's poise, by a “forward double;” that is, by taking a step forward on the left foot and at the same time swinging the right foot in front and holding it there.

SOME DEFINITIONS.

LADY'S POISE.—This requires the weight to be on the left foot, with the right foot in front and raised.

GENTLEMAN'S POISE.—This requires the weight to be on the right foot, with the left foot raised in front.

RAISED FOOT POSITION.—The sole of the shoe should face back.

ARCHED INSTEP.—The toes of the raised foot should be pointed downward so as to keep the sole of the shoe of the raised foot facing backward.

HALF MEASURE.—The first three counts of a measure; or the last three.

WHOLE MEASURE.—All the six counts of a measure.

With the foregoing definitions we ought to be able to proceed for a while. Let the Third Practice be continued by reviewing the forward double as stated, then proceeding with another forward double as follows: The second forward double is taken by changing the lady's poise to a gentleman's poise, which requires the right foot to be advanced so as to take the whole weight of the body and on the same count the left foot must swing to the front. This brings the body to gentleman's poise, the same as at the start, except that it is farther forward by two full steps. In order to accomplish this artistically the advance must be a decided one on each step, not merely putting the raised foot down and supporting the weight upon it; but the taking of a liberal step is required in each instance. The third practice, therefore, is a series of forward doubles.

GENTLEMAN'S BOW.—This is quite different from any of the ordinary bows seen even in the best society. It is the courtier's bow. Its chief value is in teaching the composure and polish of the most beautiful refinement. In Figure 345 we see merely the position required for the feet in making the bow. The heel of the right foot is brought close up to the instep of the left foot, and the two are placed so as to make two sides of a square or a right angle. It will be noticed that the gentleman carries the left hand upon the hip; and in former days his chapeau or hat was thus supported under the left arm.

GENTLEMAN'S BOW.—*Count One.*—This requires unusual care as to details. It cannot be clumsily executed and pass muster, for there are too many little matters to be given proper attention. As will be seen very soon, there are four whole measures to the action

of the minuet; the first whole measure has three counts for one foot to lead, and three counts for the other foot to lead; these are re-



Fig. 345.

GENTLEMAN'S BOW.—FEET POSITION.

The above costume is recommended for the modern minuet.

peated in the second whole measure; and are again repeated in the third whole measure; this last ending on the eighteenth count. On

that number the weight should be found on the right foot for a gentleman. Then comes the last whole measure, called the "bowing



Fig. 346.

GENTLEMAN'S BOW.—POSITION IN COUNT ONE.

We are endeavoring to encourage the introduction of the costume of a hundred years ago for the men of to-day in the minuet.

measure," for all six counts are devoted to this one part of the action. Thus, one-fourth of all the minuet movements, steps and details, is devoted to the bow. This is a very large proportion, and

no doubt accounts for the culture and polish which are derived from the art.

DETAILS OF THE GENTLEMAN'S BOW.—The nineteenth count, as we have just seen, is the first count of the "bowing measure," and every fourth minuet measure is devoted to bowing. While it is



Fig. 347.

the nineteenth count, we will refer to it as count one of the bow. On this count one, let the heel of the right foot be brought up to the instep of the left foot, touching it; at the same time lower the head;

and at the same time advance the right hand to the front while holding it down as low as possible without bringing it nearer than eighteen inches to the body. Thus there are three things to be done on count one of the bow; namely, to bring the feet together, to lower the head a little, and to lower the right hand to the front. All the while the left hand rests on the left hip. Now the stepping into position for the correct attitude of the feet is called one action; it is really a double step, for the left foot is required to determine the direction of the bow, and often must move to a certain position, while the right foot must invariably come to it; so the two steps are necessary for the position of the feet. In such case there are four things to be done on count one of the minuet bow; namely:

Move left foot	}	All on count one of the gentleman's bow.
Move right foot		
Lower the head		
Lower the hand		

Practice these as the nineteenth count; and keep practicing them until they can be smoothly performed.

Count two of the bow requires the further lowering of the head, and the raising of the hand toward the heart; but both these motions are very slight, as seen in Figure 347.

Count three of the bow requires the further lowering of the head, and the further raising of the hand toward the heart; the torso descending all the time.

Count four of the bow lowers the head and torso until the heart meets the rising hand, as seen in Figure 348, which is a very moderate bow for a gentleman. It is low enough to begin with; but a true courtier makes the third count as low as our fourth, and the fourth as much lower as possible, even bringing the torso so low as to present the back in a horizontal position, or parallel with the ceiling.

Count five of the bow brings the body almost up again to the erect position, with the hand down to where it was on count one.

Count six of the bow requires a number of things to be executed at once. The weight, which has been on both feet equally, must now be suddenly transferred to the right foot, the left foot must be raised to the gentleman's poise; the right hand must be

lifted high and seize the lady's; and everything done to get in preparation for the first step of the next whole measure. Herein we see the necessity of poise; and its value is of the highest order if one would avoid failure. Here is a summary of the details of the

GENTLEMAN'S BOW.

COUNT ONE.—Same as Figure 346.

COUNT TWO.—Same as Figure 347.

COUNT THREE.—Same as Figure 347 with torso a few inches lower.



Fig. 348.

COUNT FOUR.—Same as Figure 348.

COUNT FIVE.—Same as Figure 346.

COUNT SIX.—Gentleman's poise.

By following these directions carefully, you may quickly learn the full action of the bow of the gentleman. Remember that the rising hand and the lowering torso are continually ap-

proaching each other from count one to count four; and that the greater this beautiful opposition is made in its range of action, the more stately will be the effects. The opposition is made by the opposite directions taken by the hand and heart; the hand is coming upward and inward toward the heart; and the heart is coming forward and downward toward the hand. You might say that the head and hand in both lowering together make a parallelism and thus show awkwardness, as being a breach of Ralston Principle No. 81. This would be true if the head and hand are lowered on the same side of the body; but the threatened parallelism may be averted by lowering the hand to the right, and lowering the head to the left; thus developing an unusually beautiful opposition.

THE LADY'S BOW.—This is quite different from that which is required of the gentleman. On count eighteen, at the end of the third dancing measure, she should find herself with the entire weight on the left foot, and standing with the right foot raised as in the gentleman's poise. On count nineteen she enters into the lady's bow, which has six counts all coinciding with those of her partner; and we will see what these six counts are.

Count one of the lady's bow requires her to withdraw her right foot to a certain position, to be described soon, and at the same time to draw the left foot back and behind the right as far as possible; the larger the step, the more graceful will be the bow.

Count two of the lady's bow requires that the right leg remain straight and unbent at the knee; while the left leg, which is in the rear, should be bent more and more at the knee as the body descends.

Count three is the same as two, except that the body is lowered.

Count four is the lowest position that the lady is able to take; the lower the better.

Count five is the same as count one.

Count six is lady's poise; that is, the weight is on the left foot and the right foot is raised in front, as in Figure 363.

DIRECTIONS OF THE GENTLEMAN'S BOW.—The gentleman finds it important to know in what direction to address his bow; and the same problem will arise in the lady's mind. As we have said, the left foot of the gentleman must determine in what direction he will address his bow; so will the lady's right foot solve the question for her. Let us see what is meant. On count eighteen of the dance

steps, the gentleman finds his weight on the right foot. The left is free. Now he has three directions in which it is possible to bow; in front, or to his partner, or to the rear; but never with his own back to his partner. If he seeks the first, to bow in front, he must on count one of the "bowing measure" move his left foot a little to the rear and bring his right foot up against it. If he seeks to bow to his partner, he must on the same count move his left foot to a left lateral position, bring his right to it, and proceed. If he seeks to bow to the rear he must advance his left foot to the front, turn on its ball, bring the right foot up to it, and proceed. This study in poise and action is of itself a training school in grace, polish and ease. Try it for a while, and see what grand results are derivable from it. No person who graduates from the minuet can fail to become an exquisitely easy and beautiful dancer. In fact it is the most speedy way of acquiring natural grace for all purposes in life.

DIRECTIONS OF THE LADY'S BOW.—Here the right foot has the power to determine this question. She too may bow to the front, or to her partner, or to the rear. If to the front, she must on the first count of the bowing measure move her right foot to the rear and her left foot directly behind that. If she wishes to bow to her partner she must move her right foot to a right lateral position, and her left foot still further to the right lateral beyond the right foot. If she wishes to bow to the rear she must step to the front on her right foot, turn on its ball, swing the left foot around the right foot still further to the front and face to the rear. All this must be done on one count, and is no easy matter.

The head plays an important part in the beautiful effects of the minuet. We will try to show you the difference between an inclination of the head and a turn. If you look to the front and hold the head erect, it is neither turned nor inclined. If you look to the front and lean the head to the right, it is inclined but not turned. If you hold the head erect and look to the right, it is turned but not inclined. If you lean the head to the right and look to the right, it is both inclined and turned; but this is a parallelism of head and gaze, though not considered awkward, as the laws of grace do not include two operations of the same part. But as it is possible to produce some very beautiful oppositions out of these attitudes, the minuet long generations ago made use of the opportunity, and so we have them.

The minuet oppositions of the head are most inter-



Fig. 349.



Fig. 350.

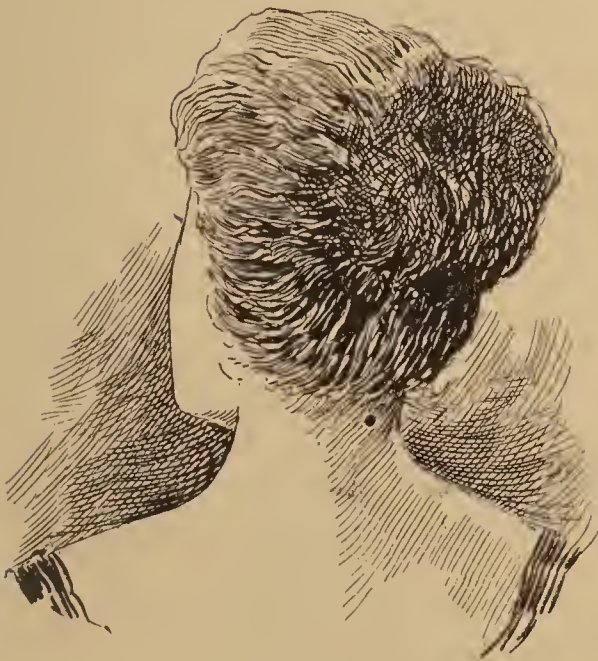


Fig. 351.



Fig. 352.

ATTITUDES OF THE HEAD.

Showing the Oppositions of the Minuet.

esting. Instead of looking to the front or to the right when the head is inclined to the right, the face is turned to the left, as seen in Figure 349. Here the inclination is very slight, and this is the safer course, for fear of becoming affected; but the ladies of the courts of

Europe in the politest society raise the chin higher, incline the head more and turn the face farther in its opposition. Then when the head is inclined to the left as in Figure 350, the face is turned to the right. A back view of 349 is seen in 351, where the turn is to the left and the inclination to the right. Likewise 352 is a reverse of 350, the turn being to the right and the inclination to the left. The gentlemen are required to observe the same inclinations and turns, as may be seen in Figures 364, 365, 366 and 367. Other laws come into play and will be described presently.

LAWS OF INCLINATION OF THE HEAD.—When the weight is on the right foot, the law of opposition of the body requires that the hip be projected to the right so as to lean in that direction beyond the position of the feet. The head always goes with the hip in perfect grace, though there are many effective attitudes where this is not done at all times. The head seeks naturally to incline toward the side of the body which is over the foot that sustains the weight. Thus if the weight is on the right foot, the head would incline to the right; if the weight is on the left foot, the head would lean to the left. The perfect combination of a right foot position is as follows: Weight on the right foot, hip leaning to the right, head inclined to the right, and face turned to the left. Can you do all this?

The perfect combination to the left is as follows: weight on the left foot, hip leaning to the left, head inclined to the left and face turned to the right. It is indeed a most difficult combination; it is a training school of grace complete in itself, the greatest in the world. Study all these details, resolve not to be discouraged, master them. Conquer one a day or one a month, and you will all the time be making progress. What is obscure now will be clear in time, little by little perhaps, but sure. Some day there will come a pride to you as a reward for patient industry in the line of the body's best culture. It will pay you then; so do not be discouraged now at the seemingly great difficulties involved.

USE OF THE FAN.—In the old minuet the gentleman carried his chapeau or hat in his left hand, resting on his hip; but we do not think this adds materially to the effect. A hat is not a part of the drawing room attire. But the lady's fan may be considered as a natural incident to her presence in the drawing room. When she is taking the steps the fan may hang free as in Figure 359, or may be carried in the left hand, which also holds the skirt of her dress, or may be otherwise attached; but it must be available when the

bowing measure is reached. On count one, she should take it in her right hand as in Figure 360; on count two of the bow she should



Fig. 353.



Fig. 354.



Fig. 355.



Fig. 356.



Fig. 357.



Fig. 358.

raise it as the body is being lowered, as in Figure 361; on count three she should raise it still higher; on count four she should assume the position as seen in Figure 362, or something similar.

The fan may be manipulated in many ways, and much of the effective beauty of the minuet on the part of the lady is due



Fig. 359.



Fig. 360.



Fig. 361.



Fig. 362.

to this action. In Figure 353 the fan is held directly in front of the chest, which is a very natural position. In Figure 354 it hides the

lower half of the face, the eyes peering over it in a very tempting manner. In Figure 355 the fan hides a part of the forehead; in 356 it is placed at the back of the head; in 357 the lady looks out from the right of the fan which is on her left, and in 358 she reverses this, looking out from the left side of the fan, which is on her right. We present these manipulations with the body apparently erect; but this is done to merely show how the fan may be employed.

If you will study the single position found illustrated in Figure 362 you will see the lady in a low bow with the fan in the attitude of that shown in Figure 355. On her next bow she may manipulate the fan in some other way; and so continue until the changes have been rung. Naturalness is one of the most potent elements of grace; and this cannot come except by incessant and repeated practice. The lady is required to raise her left hand on high to be taken by the gentleman's right hand, as seen in Figures 363, 364 and 365. This allows her right hand to remain free to use in guiding her dress as is also seen in 363 and 364. But when she makes the bow, she must take her dress in her left hand and the fan in her right; and here the manipulation begins. Figure 359 shows the right hand at the dress; and 360 shows the left hand at that garment while the right has seized the fan. In 361 the fan is being opened; and in 362 it is in full use. Thus the gentleman uses his right hand in one way, and the lady in another; he swings it down low to his right on count one of the bow, while she is seizing her fan; then his hand seeks his heart, while hers approaches her face. To perform these necessary movements requires practice and determination.

FIRST MINUET DANCE.

This is very plain, and must be regarded as merely introductory. Even if so, it is rather beautiful to look upon, and enjoyable to those who participate in it. The minuet has so many details of fine action that the kind of step employed is of less apparent importance to the beginner. We wish you to become an adept, and an expert; so we trust that you will diligently persist in perfecting all the little details first, especially those involved in the 76th to the 100th Ralston Principles explained on previous pages of this book; then the minuet details must have ample attention.

The first minuet dance consists of eighteen steps, all called the single forward steps; then the bow follows in six more

counts. We wish to present these twenty-four movements in analytical form. Look at the music which is printed herewith and



Fig. 363.

count the accents as they appear in the measures. The numbers at the left are those of the musical accents, of which there are six to a whole measure, or three to a half measure.

DETAILS OF FIRST MINUET DANCE.

Accents. Preparation: Gentleman's Poise.

1. Forward step on left foot.
2. Same on right foot.
3. Same on left foot.
4. Same on right foot.
5. Left foot; all forward steps to end.
6. Right foot.
7. Left foot.
8. Right foot.
9. Left foot.
10. Right foot.
11. Left foot.
12. Right foot.
13. Left foot.
14. Right foot.
15. Left foot.
16. Right foot.
17. Left foot.
18. Right foot.
19. Count one of gentleman's bow.
20. Count two of gentleman's bow.
21. Count three of gentleman's bow.
22. Count four of gentleman's bow.
23. Same as count one of bow.
24. Gentleman's poise.

SECOND MINUET DANCE DETAILS.

Accents. Preparation: Gentleman's Poise.

1. Forward step on left foot.
2. Recede step on right foot. Gentleman's poise.
3. Forward step on left foot.
4. Forward step on right foot, passing left foot.
5. Recede step on left foot. Lady's poise.
6. Forward step on right foot.
7. Forward step on left foot, passing right foot.
8. Recede step on right foot. Gentleman's poise.
9. Forward step on left foot.
10. Forward step on right foot.

The Minuet.

MOZART.

1 2 3 4 5 6 7 8 9 10 11 12
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^
Moderato.

p

13 14 15 16 17 18 19 20 21 22 23 24
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

25 26 27 28 29 30 31 32 33 34 35 36
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

f

37 38 39 40 41 42 43 44 45 46 47 48
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

49 50 51 52 53 54 55 56 57 58 58 60
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

p

This musical score is for 'The Minuet' by Wolfgang Amadeus Mozart. It is written for piano in G major (one sharp) and 3/4 time. The tempo is marked 'Moderato'. The score consists of 60 measures, organized into six systems of two staves each (treble and bass clef). Measures 1-12 are marked with a piano (*p*) dynamic. Measures 13-24 continue the piano dynamic. Measures 25-36 are marked with a forte (*f*) dynamic. Measures 37-48 continue the forte dynamic. Measures 49-60 are marked with a piano (*p*) dynamic. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings. The piece concludes with a final cadence in measure 60.

The Minuet.—Continued.

61 62 63 64 65 66 67 68 69 70 71 72 73 74 75

^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

cres. *p*

76 77 78 79 80 81 82 83 84 85 86 87 88 89 90

^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

cres.

91 92 93 94 95 96 97 98 99 100 101 102 103 104 105

^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

FINE. *f*

106 107 108 109 110 111 112 113 114 115 116 117 118 119 120

^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

V

121 122 123 124 125 126 127 128 129

^ ^ ^ ^ ^ ^ ^ ^ ^

V

The Minuet.—Concluded.

130 131 132 133 134 135 136 137 138

cres.

139 140 141 142 143 144 145 146 147 148 149 150

brillante.

151 152 153 154 155 156 157 158 159 160 161 162

ff pesante.

163 164 165 166 167 168 169 170 171 172 173 174 175 176 177

f

178 179 180 181 182 183 184 185 186 187 188 189 190 191 192

D. C.

11. Recede step on left foot. Lady's poise.
12. Forward step on right foot.
13. Forward step on left foot.
14. Recede step on right foot.
15. Forward step on left foot.
16. Forward step on right foot.
17. Recede step on left foot.
18. Forward step on right foot.
19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.
23. Same as count one of bow.
24. Gentleman's poise.

It will be noticed that the gentleman always takes the lady's poise when he stands with the weight on the left foot with the right foot raised in front; also that the lady takes the gentleman's poise when she stands with the weight on the right foot with the left foot raised in front. These terms are names merely of the first or preparatory attitude of each sex; after which they may apply to either. It hardly needs saying that the lady dances the same details as the gentleman; and, to learn her steps, it is merely necessary to change the words right to left, and left to right.

The head and body oppositions are arranged according to the plan of the dance. They differ materially in these first two dances, and we will explain why. Here are two rules of opposition.

1. **When the weight is advanced** continually on successive steps, the head and hips shift their oppositions on each step. Thus in the first dance the weight is advanced on the left foot, then on the right, then on the left, and so on; without any receding movements; in which case the hip and head inclined to the left on count one; then, on count two, the hip and head incline to the right, because the weight is advanced continuously.

2. **When the weight is receded** and advanced in turn, the oppositions of the hip and head remain fixed throughout a half measure. This distinction is of the utmost importance. Thus it will be seen in the second dance that on count one the weight is carried forward, then is receded on count two, and is again carried forward on count three; or, in other words, it is forward, back and

forward, in the half measure. In these three steps, two are taken on the left foot, while the recede step is taken on the right foot; making two-thirds of the measure a left foot advance. In this case the hip swings to the left, and the head inclines to the left on all three of the steps, the face being turned to the right, as it is really a left-foot half-measure. Then on counts four, five and six the weight is advanced on the right foot, retired on the left and again advanced on the right; making two-thirds of the half-measure devoted to the right-foot action, in which case the hip should be inclined to the right and the head also inclined to the right, the face being turned to the left. This requires fewer changes of the opposition in the second dance, as there is but one to every three counts; while in the first dance there is a change on each count, or six to a measure against two to a measure in the second dance. This renders the latter a more stately movement.

THIRD MINUET DANCE.

Accent.

Preparation: Gentleman's Poise.

1. Forward double on left foot. Lady's poise.
2. Forward double on right foot. Gentleman's poise.
3. Forward double on left foot. Lady's poise.
4. Forward double on right foot. Gentleman's poise.
5. Forward double on left foot. Lady's poise.
6. Forward double on right foot. Gentleman's poise.
7. Forward double on left foot. Lady's poise.
8. Forward double on right foot. Gentleman's poise.
9. Forward double on left foot. Lady's poise.
10. Forward double on right foot. Gentleman's poise.
11. Forward double on left foot. Lady's poise.
12. Forward double on right foot. Gentleman's poise.
13. Forward double on left foot. Lady's poise.
14. Forward double on right foot. Gentleman's poise.
15. Forward double on left foot. Lady's poise.
16. Forward double on right foot. Gentleman's poise.
17. Forward double on left foot. Lady's poise.
18. Forward double on right foot. Gentleman's poise.
19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.

23. Same as count one of bow.

24. Gentleman's poise.

All the foregoing is to be danced by the gentleman. It will be noticed that the double steps consist of the movements of both feet on one count; as on count one the weight is advanced on the left foot and the right foot swings forward in front of it. Lady's poise is as often taken by the gentleman as is his own poise; and she takes his poise as often as her own. These terms are merely names to distinguish one from the other. Thus when the weight is on the right foot and the left foot is raised in front it is always known as gentleman's poise no matter whether taken by him or by the lady; and the reverse poise is named likewise the lady's, whether he or she takes it.

FOURTH MINUET DANCE.

Accent. Preparation: Gentleman's Poise.

1. Forward step on left foot.
2. Recede step on right foot. Gentleman's poise.
3. Forward double on left foot. Lady's poise.
4. Forward step on right foot.
5. Recede step on left foot. Lady's poise.
6. Forward double on right foot. Gentleman's poise.
7. Forward step on left foot.
8. Recede step on right foot. Gentleman's poise.
9. Forward double on left foot. Lady's poise.
10. Forward step on right foot.
11. Recede step on left foot. Lady's poise.
12. Forward double on right foot. Gentleman's poise.
13. Forward step on left foot.
14. Recede step on right foot. Gentleman's poise.
15. Forward double on left foot. Lady's poise.
16. Forward step on right foot.
17. Recede step on left foot. Lady's poise.
18. Forward double on right foot. Gentleman's poise.
19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.
23. Same as count one of bow.
24. Gentleman's poise.

SECOND STEP OF THE MINUET.

The gentleman is in lady's poise, and the lady is in gentleman's poise. She has modern costume; he the old-time dress, which we recommend.



Fig. 364.

Fig. 365.

In the foregoing dance, three different details are used; the forward, the recede step and the forward double; thus developing a very pretty combination of action.

FIFTH MINUET DANCE.

Accent. Preparation: Gentleman's Poise.

1. Forward double on left foot. Lady's poise.
2. Forward step on right foot.
3. Recede step on left foot. Lady's poise.
4. Forward double on right foot. Gentleman's poise.
5. Forward step on left foot.
6. Recede step on right foot. Gentleman's poise.
7. Forward double on left foot. Lady's poise.
8. Forward step on right foot.
9. Recede step on left foot. Lady's poise.
10. Forward double on right foot. Gentleman's poise.
11. Forward step on left foot.
12. Recede step on right foot. Gentleman's poise.
13. Forward double on left foot. Lady's poise.
14. Forward step on right foot.
15. Recede step on left foot. Lady's poise.
16. Forward double on right foot. Gentleman's poise.
17. Forward step on left foot.
18. Recede step on right foot. Gentleman's poise.
19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.
23. Same as count one of bow.
24. Gentleman's poise.

SIXTH MINUET DANCE.

Accent. Preparation: Gentleman's Poise.

1. Tap with left foot. Gentleman's poise.
2. Tap with left foot. Gentleman's poise.
3. Forward double on left foot. Lady's poise.
4. Tap with right foot. Lady's poise.
5. Tap with right foot. Lady's poise.
6. Forward double on right foot. Gentleman's poise.
7. Tap with left foot. Gentleman's poise.
8. Tap with left foot. Gentleman's poise.
9. Forward double on left foot. Lady's poise.
10. Tap with right foot. Lady's poise.

11. Tap with right foot. Lady's poise.
12. Forward double on right foot. Gentleman's poise.
13. Tap with left foot. Gentleman's poise.
14. Tap with left foot. Gentleman's poise.
15. Forward double on left foot. Lady's poise.
16. Tap with right foot. Lady's poise.
17. Tap with right foot. Lady's poise.
18. Forward double on right foot. Gentleman's poise.
19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.
23. Same as count one of bow.
24. Gentleman's poise.

In the sixth dance, as above, a contrary opposition is executed, which is very pretty if done well. On count one, which is a tap with the left foot, the head and upper part of the body should lean to the left oblique front, thus making a continuous curve with the whole body, which is not ungraceful as it is not an attitude but an action, and a shifting one at that. The advance of two parts of the body, not continuous, makes an opposition, as has before been stated. On count two the tap of the left foot is repeated. On count three a double forward step is taken on the left foot, resulting in lady's poise; and throwing the head and upper torso over in a right oblique front attitude to balance the upraised right foot. Then two taps are made with that foot on counts four and five; and on count six the double forward step is taken on the right foot, resulting in gentleman's poise; and so on to the end. The beauty of this dance consists in raising the foot very high in the obliques, and bending over very low in the same direction.

SEVENTH MINUET DANCE.

Accents.

Preparation: Gentleman's Poise.

1. Forward step on left foot.
2. Recede step on right foot. Gentleman's poise.
3. Forward double on left foot. Lady's poise.
4. Forward step on right foot.

THIRD STEP OF THE MINUET.

Showing the attitude also of a "Forward double," when taken as the sixth step of a full measure. It is also the attitude of preparation before the first step; showing lady's poise and gentleman's poise.



Fig. 366.

Fig. 367.

5. Recede step on left foot. Lady's poise.
6. Forward double on right foot. Gentleman's poise.
7. Forward step on left foot.
8. Recede step on right foot. Gentleman's poise.
9. Forward double on left foot. Lady's poise.

10. Forward step on right foot.
11. Recede step on left foot. Lady's poise.
12. Forward double on right foot. Gentleman's poise.
13. Forward step on left foot.
14. Recede step on right foot. Gentleman's poise.
15. Forward double on left foot to lady's place.
16. Forward step on right foot.
17. Reverse recede step on left foot. Lady's poise.
18. Forward double on right foot. Gentleman's poise.
19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.
23. Same as count one of bow.
24. Gentleman's poise.

THE TURN.

On count thirteen in the foregoing dance, the gentleman releases the lady's left hand and she gives him her right hand in place of it as in Figure 368. As the execution of the minuet turn is the most difficult step known, whether in this or any other form of dancing, we feel called upon to explain it as fully as possible. In the first place you must bear in mind that at the end of the first two measures, or on count twelve, the gentleman and lady are facing forward, he holding her raised left hand in his right. On count thirteen she gives him her right hand, which he takes in his right, and both take a step; she seeking to walk around him by taking her first step just behind his heels. But he has also taken a step, in endeavoring to walk around her. Figures 368 and 369 show them when they have succeeded far enough to have reversed positions; she being on his left as he faces forward; but the next step will bring them face to face. After the third measure is completed, they will bow, face to what was the rear of the first advance, she will then be on his right side, he will take her left hand in his right hand, and continue in the opposite direction from that first taken.

The difficulty of this turn will become apparent when it is attempted. No picture can explain it; indeed, an illustration is of but little value. We will try with words to make it clear. In the first place you must remember that the goal of the gentleman is

to cross over to the lady's place; that is all. She, likewise, seeks to come to his position; the purpose being to have her on his right when they dance the measures back to their original starting point. He takes the thirteenth step in front of her; she takes the same back of him; but as both are actually turning, they really face each other. The question might be asked, why does not the lady pass in front of the gentleman? This cannot be done, if he uses his right hand to guide her. Let us see what details are involved in the present action; then we can study the use of the left hand in later changes.

A DIFFICULT POSITION IN THE TURN.

This is fully described in the accompanying pages. We recommend a modern dress for the lady and the old-time dress for the gentleman.

The fifth step of the turn is the only very difficult movement. This is count seventeen of the seventh minuet dance, and is called the reverse recede step. We will lead up to it. On count thirteen the gentleman attempts to walk in front of the lady by stepping in the right lateral direction with his left foot. This causes him to turn partly around so as to face her as she is attempting to execute the step behind him on her right foot. This much should be easy to do. Then both take a recede step, he back on his right foot; she back on her left foot; while he holds her right hand in his right hand. Then both take a double step, he toward the position she occupied; and she toward that he occupied; he a forward double on the left foot; she a forward double on the right foot; leaving him in lady's poise, and her in gentleman's poise. Now comes the fourth step, and the situation soon becomes difficult. He takes a forward step to the right side with his right foot and stands on that foot in the exact position that she occupied on the twelfth count; she takes a forward to the left side with her left foot and occupies the exact position that he occupied on the twelfth count. Now comes the hardest of all; the movement that few can understand until they have practiced it many times. His back is to her, and hers to him; but on count seventeen, or the fifth step of the turn, he takes a reverse recede step on the left foot, and she takes a reverse recede step on the right foot. This step turns the body completely around. He advances the left foot farther to the right lateral position and turns the body on the ball of the left foot, facing her. She advances the right foot farther to the left lateral position, turns on

the ball of the right foot and faces him. The step would be an advance but for the fact that the body turns upon it and leaves it in a recede position; besides which, it occurs on the count where a recede step is called for.



Fig. 368.

Fig. 369.

Now both persons are facing each other, she in his place and he in hers. They have yet the eighteenth count to execute, which is a forward double toward each other, resulting in the proper location for the bow. Each bows in the counts from nine-

teen to twenty-four; ending by his taking gentleman's poise on twenty-four, and her taking lady's poise. This is the preparation for the dancing of the same steps over again from count one to twelve, back to their original location; then the turn; then the bow; and so continue. It must be remembered that, when a couple has danced twelve steps they are nearly across the room unless it is unusually large; and they must get back again without breaking the action. There are several ways in which they can go back; the least desirable of which is allow the lady to return on the gentleman's left, he holding her right hand in his left. This would permit eighteen counts to be stepped, then the bow, then the return; and so on. But twelve counts are sufficient in one direction in a small room; and are also sufficient for one kind of action; so they turn and thus employ the third whole measure, counts thirteen to eighteen, in exchanging places; and the bow always takes the fourth whole measure.

EIGHTH MINUET DANCE.

Accent. Preparation: Lady's poise for both partners.

1. Tap to right lateral with right foot.
2. Tap to right lateral with right foot.
3. Forward double to right lateral with right foot. Gentleman's poise.
4. Tap to right lateral with left foot.
5. Tap to right lateral with left foot.
6. Forward double to right lateral with left foot. Lady's poise.

THE LATERAL STEPS.

These are very beautiful and somewhat difficult. The chest must face to the front, while the feet and body move to the side for eighteen steps.

7. Tap to right lateral with right foot.
8. Tap to right lateral with right foot.
9. Forward double to right lateral with right foot. Gentleman's poise.
10. Tap to right lateral with left foot.
11. Tap to right lateral with left foot.
12. Forward double to right lateral with left foot. Lady's poise.
13. Tap to right lateral with right foot.

14. Tap to right lateral with right foot.
15. Forward double to right lateral with right foot. Gentleman's poise.
16. Tap to right lateral with left foot.
17. Tap to right lateral with left foot.
18. Forward double to right lateral with left foot. Lady's poise.



Fig. 370.

Fig. 371.

19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.
23. Same as count one of bow.

24. Gentleman's poise for both partners.
25. Tap to left lateral with left foot.
26. Tap to left lateral with left foot.
27. Forward double to left lateral with left foot. Lady's poise.
28. Tap to left lateral with right foot.
29. Tap to left lateral with right foot.
30. Forward double to left lateral with right foot. Gentleman's poise.
31. Tap to left lateral with left foot.
32. Tap to left lateral with left foot.
33. Forward double to left lateral with left foot. Lady's poise.
34. Tap to left lateral with right foot.
35. Tap to left lateral with right foot.
36. Forward double to left lateral with right foot. Gentleman's poise.
37. Tap to left lateral with left foot.
38. Tap to left lateral with left foot.
39. Forward double to left lateral with left foot. Lady's poise.
40. Tap to left lateral with right foot.
41. Tap to left lateral with right foot.
42. Forward double to left lateral with right foot. Gentleman's poise.
43. Count one of bow.
44. Count two of bow.
45. Count three of bow.
46. Count four of bow.
47. Same as count one of bow.
48. Lady's poise for both partners.

The foregoing dance is used for the purpose of transferring a column from one side of the room to the other. All the steps are lateral. The chest must face to the front in the execution of every step; while the feet move to the lateral or side. If this rule is not observed the whole effect is marred. It requires great suppleness and grace of body to keep the chest facing to the front while the feet are moving sidewise. The first eighteen counts will transfer the column to the right side of the room; then comes the bow; and the next eighteen counts (twenty-five to forty-two) will re-transfer the body to the left side of the room; the second bow completing. When there are two columns of dancers, one on the

right and the other on the left, the former must start off with the left foot tapping, every step being the reverse of that we have described. This enables the right hand column to move to the position occupied by the left, while the left is moving to the position occupied by the right. In such cases it may be desirable to not re-transfer until some other dance has been executed. Remember that partners in the eighth minuet dance must cross arms, as in Figures 370 and 371, the gentleman taking the lady's right hand in his right, while the left arm is underneath. Also remember that both partners start off with the same foot, and do not use opposite steps in these movements.

THE TURN ON THE SAME FOOT.

By the same foot is meant the right foot action by both partners on the same count; or the left foot action by both partners on the same count. In the eighth minuet dance it will be noticed that, when the partners move to the right, they both advance the right foot at the same time; and so on. In case a turn is desired, it will be necessary to retain this "same foot" action; that is, the left feet must be raised on the same count, as in Figures 372 and 373; and the next step would require the right feet to be raised simultaneously; and so on. To do this, the gentleman takes the lady's left hand in his left on count one of the turn; which, in the instance of both partners having started with the right foot action, would run as follows:

1. Forward step on right foot.
2. Recede step on left foot.
3. Forward double on right foot. Gentleman's poise, as seen in Figures 372 and 373.
4. Forward step on left foot.
5. Reverse recede step on right foot.
6. Forward double on left foot. Then the bow.

If both partners start with the left foot action, the attitudes seen in Figures 372 and 373 would be made on the first count of the turn. Another method of taking hands for exactly the same movement is seen in Figures 374 and 375; wherein the gentleman takes the lady's right hand in his left for the turn. We present a series of these attitudes, especially those that are applicable to the shifting



Fig. 372.

Fig. 373.

A LEFT HAND TURN.

This is necessary at certain stages of the evolutions.

of columns and partner's lines; some suiting one action, and some another. Real practice is the best teacher.



Fig. 374.

Fig. 375.

AN OPPOSITE TURN.

Ordinarily the gentleman takes the lady's right hand in his right for a turn; but when he wishes to pass around her in an opposite direction he may take her right hand in his left.

NINTH MINUET DANCE.

This requires a set of four couples, all the gentlemen in a line, each facing forward; and, on their right, in another line, the four ladies stand, also facing forward. These two lines constitute a

column; although a column may contain less than three couples and more than four if the required number are not available. The regular minuet column may be seen in Figure 376. Evolutions in the minuet are very numerous, and furnish a fruitful field of invention for any person who is skilled in resources of the mind. We present in this dance some of the most beautiful; being largely made up of those already described.

Accent.

Preparation: Both poises.

1. All forward step.
2. Recede step.
3. Forward double.
4. Forward step.
5. Recede step.
6. Forward double.
7. Forward step.
8. Recede step.
9. Forward double.
10. Forward step.
11. Recede step.
12. Forward double.
13. First step of turn (count thirteen) of seventh minuet dance.
14. Second step of turn.
15. Third step of turn.
16. Fourth step of turn.
17. Reverse recede step of turn.
18. Sixth step of turn. Lines are now facing backward.
19. Count one of bow.
20. Count two of bow.
21. Count three of bow.
22. Count four of bow.
23. Same as count one of bow.
24. Both poises. All facing back for return.
25. All forward step; in backward direction.
26. Recede step.
27. Forward double; backward direction.
28. Forward step; backward direction.
29. Recede step.
30. Forward double; backward direction.
31. Forward step; backward direction.

32. Recede step.
33. Forward double; backward direction.
34. Forward step; backward direction.
35. Recede step.
36. Forward step; backward direction.
37. First step of turn (count thirteen) of seventh minuet dance.
38. Second step of turn.
39. Third step of turn.
40. Fourth step of turn.
41. Reverse recede step of turn.
42. Sixth step of turn. Lines are now facing forward.
43. Count one of bow.
44. Count two of bow.
45. Count three of bow.
46. Count four of bow.
47. Same as count one of bow.
48. Both poises.
49. Partners face each other by turning on the ball of the foot, and take forward step toward each other.
50. Recede step from each other.
51. Forward double toward each other.
52. Recede double from each other.
53. Recede double from each other.
54. Recede double from each other.

These last three steps open the column, to prepare the way for the couple to come up the center. A recede double is a movement backward with the foot that is uplifted, followed by the other foot also moving backward and passing the former.

All four couples now face forward, as in Figures 376 and 377; though the steps are not to be the same; and the lines are still open. The first, second and third couples raise their hands as though the gentlemen were to hold the ladies' hands; but, as the lines are too far apart, they cannot touch. The rear or fourth couple will come up the center, between the raised hands; but the rear couple will have hold hands as in Figures 366 and 367, with them lifted as high as possible, so as to bring the rear partners close to each other, as the room is limited in this evolution.

55. First three couples tap: Rear couple starts to come up the center between the lines of the other three couples; and, on this count, executes the forward double step.
56. Same as 55.
57. All forward double.
58. Same as 55.
59. Same as 55.
60. All forward double.
61. Same as 55.
62. Same as 55.
63. Rear couple forward double. First three couples recede double glide.
64. Same as 55.
65. Same as 55.
66. Same as 63.
67. All execute count one of bow.
68. Also count two of bow.
69. Count three of bow.
70. Count four of bow.
71. Same as count one of bow.
72. Both poises.

At the end of 66, the two lines of the column should be in the same position as at the start, except that the fourth couple has come to the front and the third couple is left in the rear. The latter will now be called the rear couple until it has, in its turn, come to the front.

73. Partners face each other by turning on the ball of the foot, and take forward step toward each other.
74. Recede step from each other.
75. Forward double toward each other.
76. Recede double from each other.
77. Recede double from each other.
78. Recede double from each other.
79. The three couples tap, while the rear couple (formerly the third couple) starts to come up the center with forward double step.
80. Same as 79.
81. All forward double.
82. Same as 79.

83. Same as 79.
84. All forward double.
85. Same as 79.
86. Same as 79.
87. Rear couple forward double. First three couples recede double glide.
88. Same as 79.
89. Same as 79.
90. Rear couple forward double. First three couples recede double glide.
91. All execute count one of bow.
92. Also count two of bow.
93. Count three of bow.
94. Count four of bow.
95. Same as count one of bow.
96. Both poises.

At the end of 90, the two lines of the column should be in the same position as at the start, except that the third couple has come to the front and the second couple is left in the rear. The latter will now be called the rear couple until it has, in its turn, come to the front.

97. Partners face each other by turning on the ball of the foot, and take forward step toward each other.
98. Recede step from each other.
99. Forward double toward each other.
100. Recede double from each other.
101. Recede double from each other.
102. Recede double from each other.
103. The three couples tap, while the rear couple (formerly the second couple) starts to come up the center with forward double step.
104. Same as 103.
105. All forward double.
106. Same as 103.
107. Same as 103.
108. All forward double.
109. Same as 103.
110. Same as 103.

111. Rear couple forward double. First three couples recede double glide.
112. Same as 103.
113. Same as 103.
114. Rear couple forward double. First three couples recede double glide.
115. All execute count one of bow.
116. Also count two of bow.
117. Count three of bow.
118. Count four of bow.
119. Same as count one of bow.
120. Both poises.

At the end of 114, the two lines of the column should be in the same position as at the start, except that the second couple has come to the front and the first couple is left in the rear. The latter will now be called the rear couple until it has, in its turn, come to the front.

121. Partners face each other by turning on the ball of the foot, and take forward step toward each other.
122. Recede step from each other.
123. Forward double toward each other.
124. Recede double from each other.
125. Recede double from each other.
126. Recede double from each other.
127. The three couples tap, while the rear couple (formerly the first couple) starts to come up the center with forward double step.
128. Same as 127.
129. All forward double.
130. Same as 127.
131. Same as 127.
132. All forward double.
133. Same as 127.
134. Same as 127.
135. Rear couple forward double. First three couples recede double glide.
136. Same as 127.
137. Same as 127.

138. Rear couple forward double. First three couples recede double glide.
139. All execute count one of bow.
140. Also count two of bow.
141. Count three of bow.
142. Count four of bow.
143. Same as count one of bow.
144. Both poises.

At the end of 138, the two lines of the column should be in the same position as at the start, for now the first couple has come to the front and the fourth couple is left in the rear.

145. All forward step.
146. Recede step.
147. Forward double.
148. Forward step.
149. Recede step.
150. Forward double.
151. Forward step.
152. Recede step.
153. Forward double.
154. Forward step.
155. Recede step.
156. Forward double.
157. First step of turn (count thirteen) of seventh minuet dance.
158. Second step of turn.
159. Third step of turn.
160. Fourth step of turn.
161. Reverse recede step of turn.
162. Sixth step of turn. Lines are now facing backward.
163. Count one of bow.
164. Count two of bow.
165. Count three of bow.
166. Count four of bow.
167. Same as count one of bow.
168. Both poises. All facing back for return.
169. All forward step; in backward direction.
170. Recede step.
171. Forward double; backward direction.
172. Forward step; backward direction.

173. Recede step.
174. Forward double; backward direction.
175. Forward step; backward direction.
176. Recede step.
177. Forward double; backward direction.
178. Forward step; backward direction.
179. Recede step.
180. Forward step; backward direction.
181. First step of turn (count thirteen) of seventh minuet dance.
182. Second step of turn.
183. Third step of turn.
184. Fourth step of turn.
185. Reverse recede step of turn.
186. Sixth step of turn. Lines are now facing forward.
187. Count one of bow.
188. Count two of bow.
189. Count three of bow.
190. Count four of bow.
191. Same as count one of bow.
192. Both poises.

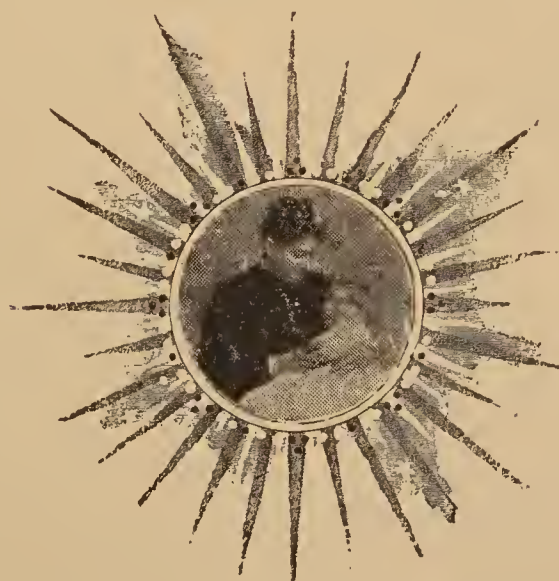




Fig. 376.

A COLUMN IN ACTION.

The ladies are in Gentleman's Poise; the gentlemen are in Lady's Poise; and the attitudes represent the third count in the most common minuet dance, where the first count is "Forward Step;" the second count is "Recede Step," and the third count is "Forward Double."



Fig. 377.

COLUMN AT END OF WHOLE MEASURE.

This is also the preparation for the first step of any whole measure. The usual measure has three accents; but it requires six accents to complete the full action of both feet before a repetition is necessary, and this is called a whole measure.



Fig. 378.

THE MINUET BOW.

Showing modern dresses for the ladies and the old-time costume for the gentlemen ; which we recommend.

GREATNESS OF THE MINUET.

Too much cannot be said in favor of this grandest of all means of refinement, as well as of dignified pleasure. It is not a dance. It is called a dance for convenience only, as no other word is so useful when referring to it; but it lacks all the objectionable elements of the dance, while retaining everything that gives relief to the weary, pleasure to all and a wholesome air of enjoyment to every occasion. It is impossible to be rude, or to do a rude thing in the minuet. It is impossible to indulge in any kind of undue familiarity or boisterous action. And it is impossible to spend an hour in this practice without finding the body and all the graces of mind and heart coming rapidly forward in the true line of development.

Every family should insist that all its members, young and old, should learn the minuet. A school ought to be established in every county and in every important part of each county and city, where the genuine minuet is honestly and skilfully taught. More properly there should be in every such place, a school of Ralston Culture, where the perfect system of physical training which constitutes the greater part of this book, should be taught; and, in connection therewith, all the principles of grace and culture that follow herein; but more particularly the glorious minuet. Will it pay? It certainly will. The age demands such schooling and such training. There is nothing better if health and culture are desired; and they are the best foundations of all else.

In America alone there are fully 100,000 good locations where such schools could be established and be made to pay; if the teachers were really qualified to command the respect of the public. We recommend a course of two regular school years in Ralston University at Washington, D. C., which would occupy only about eighteen months of time; from the last of October to the first of the following May; then a vacation of six months for practice; and from the last of the next October to the next following May; being really one whole year of training. That institution prepares its pupils to actually take charge of classes, to teach, talk, lecture, and entertain, as well as to exemplify all the exercises in the present volume from one end to the other; and herein is a world of training in itself. If you cannot spare eighteen months out of your life, you could devote the time of one school year, six months, to learn the theory and practice; after which you would be amply able to develop the full

method of training by yourself; and this certainly is the next best thing to the two school years. In any event, you can become your own teacher by the aid of the present volume, as far as its systems of culture are concerned; although one who is called upon to teach the public should by all means be a graduate of a school of expression.

There is already a demand for the minuet, and more particularly a very great demand for its refining influences in connection with Ralston Culture. Everywhere the people, the schools, the heads of educational government, are demanding good systems of physical training and skilled teachers to introduce them; and the only perfect system is that known as the Ralston. Wherever it has come into competition or comparison with any other method, it is at once pronounced the superior. Its future is assured as that of the world's leading system of physical culture. You should be ready for it. You should do all that is in your power toward establishing a school of Ralston Culture in your community or in some place equally available; and, if you do not feel qualified to teach at once you should form the acquaintance of some graduate of Ralston University, of Washington, D. C. If you wish a legalized charter on which to base your institution, all you need do is to apply properly to Ralston University, and such charter will be granted freely, without cost or expense of any kind. There must be at least twelve earnest and sincerely interested persons in the same locality, who are of the Tenth Star Degree and possess this volume of Ralston Culture. They may easily acquire the book, if they possess executive ability sufficient to lay the foundation of an institution that, however humble may be its origin, should develop some day into one of the most influential and powerful of schools in the future.

The twelve persons, whether ladies or gentlemen, may become charter members of the

SCHOOL OF RALSTON CULTURE OF YOUR LOCALITY.

When that number apply we will gladly send them full instructions free of all charge. The early meetings should be held in the homes of the members until the institution is of sufficient strength to warrant engaging a regular hall; and some day the result will be a magnificent building that shall do honor to your efforts. If you need a teacher of more experience than you possess, we can direct you to such an one, after the school has been founded. Remember that all this while you are put to no expense. Also remem-

ber that you must not use the name Ralston in connection with any system of ours, unless you are legally authorized to do so, and can show the charter, which should be hung upon the wall of the room wherein each meeting is held. We shall assist you in every way that is possible; for we firmly believe that schools of Ralston Culture will soon spring up all over America, and that they will accomplish much good. The field is a new one. Who will be the first to enter it?

RALSTON MAY DANCE.

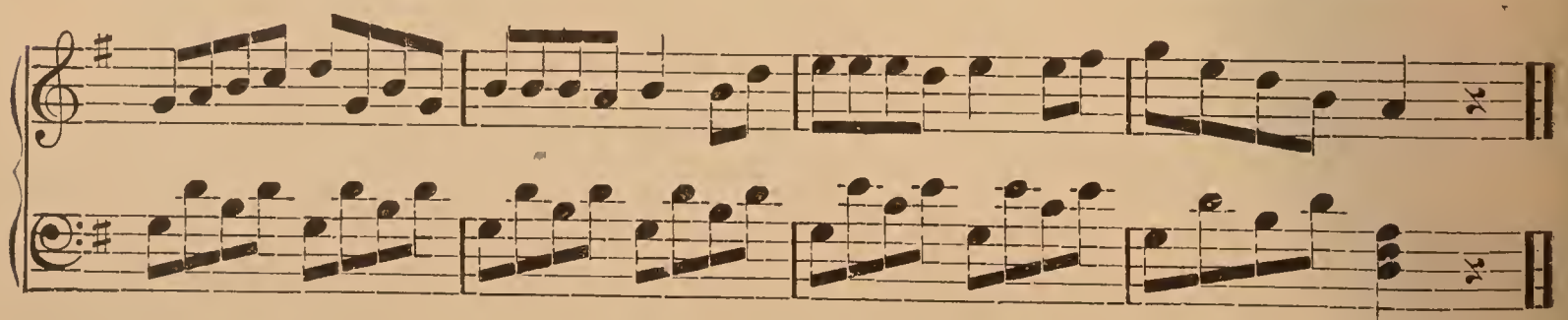
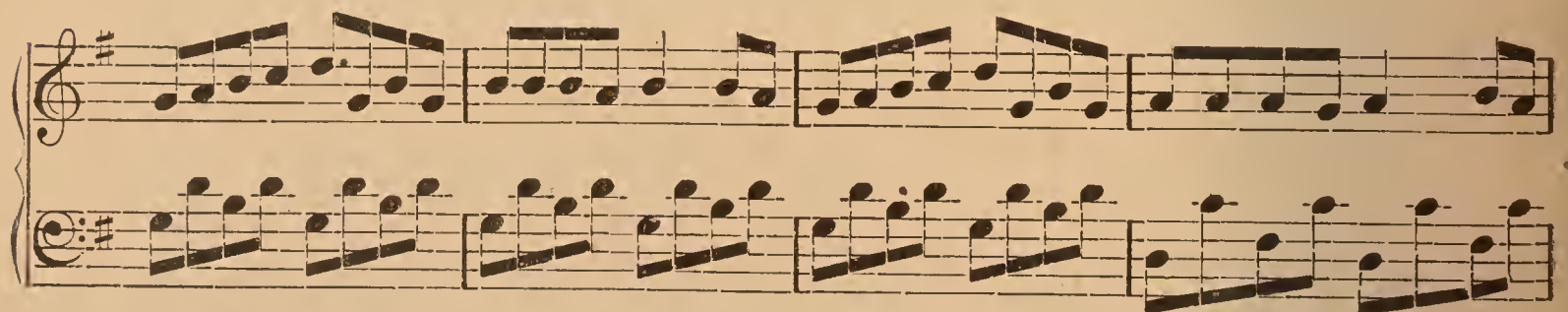
We have been asked many times to give directions for the execution of a suitable dance on Ralston Day in May, which is the first Tuesday in that month. The main requisites are tempting music, lightness, a beautiful step and variety of action. We select herewith from the airs previously used in the first half of this book, a few that are important in their application to the movements of the feet, which must be quick and spirited without danger of fatigue.

The first thing to be done is to select a dry piece of ground, or a hall or room where all likelihood of catching cold or of exposure to dampness may be avoided. It must be remembered that wet or damp ground, or grass, will quickly draw the vitality from the body and leave it a prey to the first chill. To be on the safe side, it is better to use a hall, school-room or house for the Ralston May Dance. In the first place there should be flowers of all kinds as far as available; for their rich perfume cannot fail to give pleasure and add to the charms of the occasion.

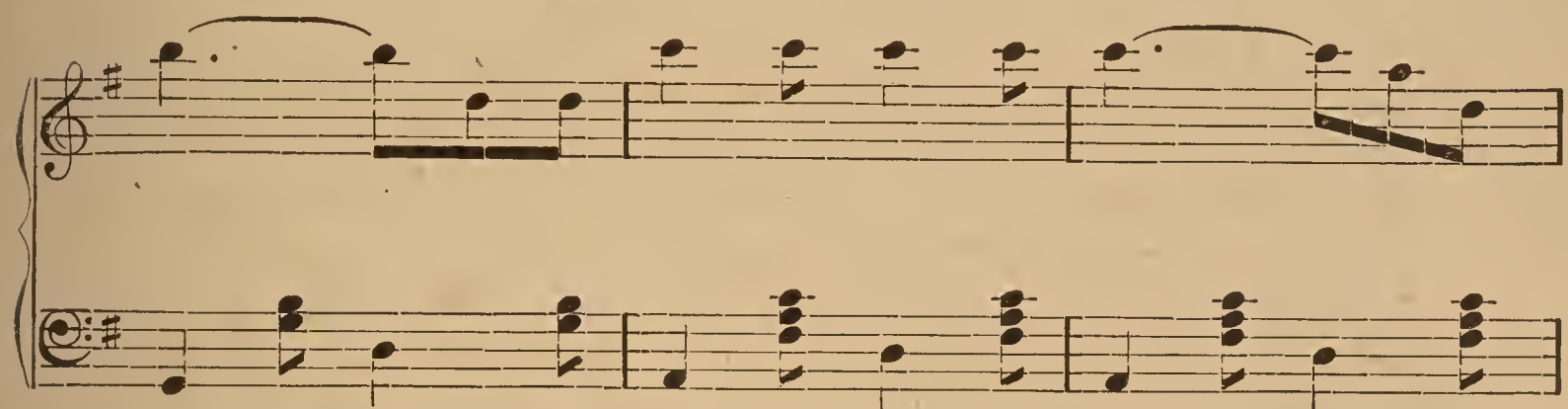
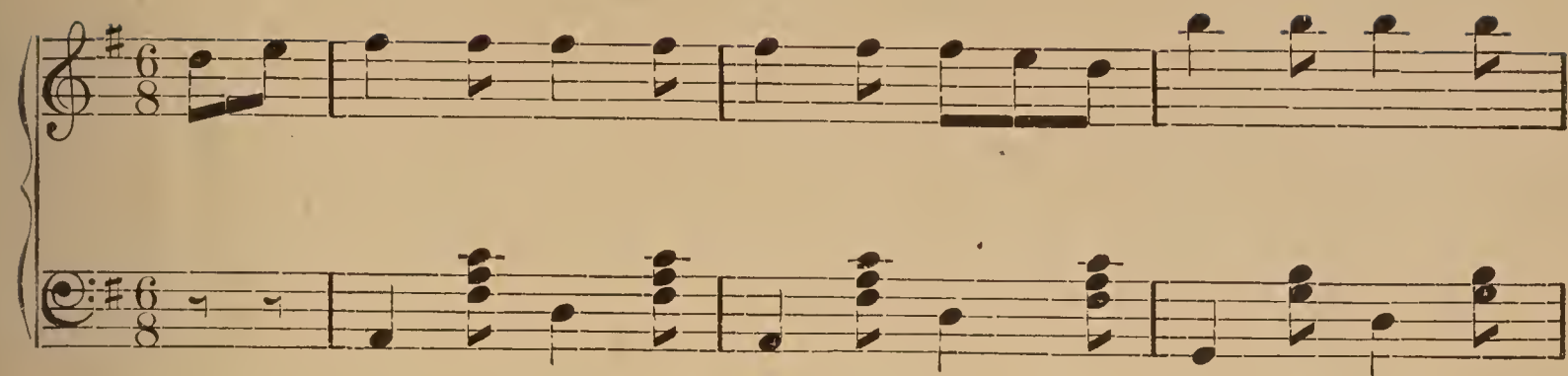
It is the custom of many peoples to erect a May Pole, duly garlanded; and dance about it regardless of weather, dampness or chills. The question of having a pole may be left to your own judgment, which will doubtless be influenced by the wishes of the people and the circumstances. It may be inconvenient; or there may be no suitable place wherein to set it; or the expense and trouble may be too great. In any event, the following evolutions are possible whether you decide to have a pole or not:

In the centre there are two kings and two queens, representing the Four Cardinal Points of Ralstonism. They carry red colored ribbons. They stand closest to the pole, in case there is one; if not, they occupy the place that would otherwise have surrounded the pole; being within all the others.

RALSTON MAY DANCE—FIRST STEP.



RALSTON MAY DANCE—SECOND STEP.



The middle ring is between the foregoing and the outer ring; and should consist of seven persons representing the Septemes of Ralstonism. They are to carry blue colored ribbons.

The outer ring is much the largest and should consist of all others who wish to take part in the dance. They represent the golden principles of Ralstonism, which are many; and should carry yellow ribbons, thus completing the three primary or elementary colors of life and light.

The center or inmost ring moves to the left and the outer ring at the same time moves to the left; while the middle ring moves to the right; all making two circuits, then reversing. If no pole is used the ribbons, which should be two yards long, are held in the two hands over the head, each dancer taking hold of a ribbon about two feet from one end with one hand, and about two feet from the other end with the other hand, allowing the two hands to be nearly two feet apart over the head. As they dance they should sway the hands from side to side to keep the colors waving. The sight is very beautiful. If there is a pole, a hoop should be fixed on projecting rods, about six or seven feet from the ground. The hoop will permit the dancers to keep all at the same distance from the pole, because of the ribbons' length; and the rods will prevent the hoop from falling. If the diameter of the pole is slight, the ends of the ribbons can be tacked to it, and thus save the use of the hoop; as the winding about twice would not shorten the ribbons appreciably. The blue colors should be attached about ten feet from the ground; and the yellow colors about fourteen feet from the ground.

The dance steps are very easy to execute, but very difficult to explain in writing. The first step of the Ralston May Dance is the daintier of the two; while the second step is more of a frolic, being exactly the same as that employed in Figure 97 of the system of Physical Culture in the first half of this book. See the account given there, and the description on a later page. The second piece of music, herein reproduced, applies to the second dance-step.

The first step is in a series of beautiful changes. The first of the series is as follows: Hop on the left foot and swing the right forward in front of it and to the left; then hop on the right foot and swing the left forward in front and to the right. Continue this until a change is desirable. The next step in the series of the first

dance is a long jump forward on left foot followed by the other's being poised in front, while the left foot gives a very small hop; and the same repeated by the right, giving a long jump and a small hop; all being blended so finely that it seems like a smooth and dainty action. Another variation is a swinging action of left foot to the front, followed by a swinging action of the right foot to the rear, then an advance of the right foot to the front, and so on. Indeed the variations are many which are possible with the accompanying music. Practice indoors should be had for some weeks prior to the May exercises; and the best place and occasion will be found in connection with the regular school of Ralston Culture which we so strongly recommend that you establish in your locality. There the pleasures of the practice will afford additional stimulus to the health and strength of the body. It will result in a grand good time for everybody.

It has been suggested that the May dance, as well as the usual Ralston Festivities, would harmonize with other seasons of the year, especially when the weather is favorable to outdoor sport, as in the middle or latter part of May; the same in June, or in July; as well as in August and the autumn months. We hope to see the time when Ralston exercises out of doors will fill up the measure of many a day and many a beautiful evening. We hope that, ere long, the happy ideas of Ralston City as presented in "Ralston Gardens," may be realized in all their fullness and potency for the uplifting of humanity, for bringing cheer to the lonely, strength to the weak, vigor to the weary, and supreme happiness to all.

CLOSING REMARKS.

There are some things that belong to the commonplaces of life; that cannot be well classed in the divisions already given in this book; and that may be mentioned here as we bring the work to a close. The first suggestion is of paramount importance; if you wish grace, ease and power, as well as polish, perfect self-containment and control; study magnetism. Study it long and faithfully. It vitalizes the whole body, the mind, the nerves, the muscles, and health itself. The cost is of too small a consideration to be given a thought, if the money can be spared; hundreds of dollars of expense cannot be much where thousands and scores of thousands of dollars of gain are received; although there need not be a dollar of real expense under the plan of the Ralston emoluments.

If you wish to be successful as a teacher, you must be magnetic. It is true that you are thus endowed in some degree; but your station in life will tell you how far you have really equipped yourself for its battle. Magnetism is the sure maker of success if you use it aright. Thus if you possess it, and yet are not in the front rank of the winners, it is because you are like the untrained engineer—ignorant of the power of his new engine. If you are utterly and absolutely devoid of all magnetism, you are a rare exception to the conditions of human existence. What you have should be developed; what you may possess now or acquire later on by practice and training should be brought under those rules that turn the power into means of substantial success in life.

If you are seeking a successful class or school in Ralston Culture, do you imagine that, without magnetism, you could secure such results; or, with magnetism, that you could long retain the interest of your pupils or even impart to them a fair value for what they pay you? To know how an exercise is to be performed, and to know all the descriptive matter pertaining to the same is not enough; the best soon wearies, even when the best is so fascinating and entrancing as that which is contained in Ralston Physical Culture. It is true that the music and the movements possess a double charm that will almost carry them without even the presence of a teacher; but let the instructor be skilled and magnetic, and the effect is instantly changed. Bright music and beautiful exercises will not have the opportunity of drawing patronage; as they come when the latter is secured. Other powers and influences must operate to bring a clientele; and magnetism is the mainspring of them all. For this reason we urge that you make it the chief object of your life to win success through such aid.

Then there are daily evidences of the direction in which you are drifting, which should be constantly studied by you if you would keep on the highway of a steady improvement. Conduct is everything, both in your own private life and in the eyes of the public. The same careful management of the body that you should insist upon in your life, ought to be insisted upon in the lives of your pupils as far as you can control them. You should watch them, and learn wherein they need advice. Some are always tired; they are never in good positions; they stand awkwardly or slovenly; they walk up stairs out of balance, as seen in Figures 379 and 381, and to climb a single flight of stairs tires them much more than the



Fig. 379



Fig. 380



Fig. 381



Fig. 382..

ascent of five flights would weary them if they were to adopt the balance and perfect poise seen in Figures 380 and 382. Yet these are merely incidents which show the direction of the drift in any life. Properly climbing stairs is recommended by physicians as the best of all exercises, especially for the heart and other organs, if not done too rapidly.

Then mind and heart must be trained for their best uses. Culture of the body is largely muscular; magnetism deals with the nervous functions to a large degree; but the intelligence and force of the mind require development in order to guide the powerful machinery of the body. Talent without judgment, toil without direction, genius without depth of design—these are discords on the better side of life; but discords nevertheless; and they wreck the engine that might otherwise have brought them safely into the highest realms of success. So the heart, the moral side of existence, must receive due attention. An unbalanced individual is incomplete; he cannot count on ultimate gain. Thus all sides of life should be studied, cultivated and developed to their highest usefulness. Failure will have its first cause in a lack of balance. Remember this; and do not forget that he or she who chooses to close the mind against the adoption of these suggestions, is very sure to cry out loudly that fate and fortune are always frowning on them.

Little lectures follow on the succeeding pages; and they are larger talks than the hundred or more little lectures that appear under the figures on previous pages. It is the latter that really were referred to in Ralston Gardens; but we have transferred the name to those full page lectures that follow at this place; so that there are two kinds and sizes of little lectures in the present volume; being more than were at first intended. This will be of greater advantage to our readers and pupils, especially those who are to study and to teach.

You can do no better and greater service than to see that every school teacher, man and woman, in your school district, becomes a member of the Ralston Club, and also acquires the full knowledge of the arts of Ralston Culture. Then they will take their own pupils in the schools through the short courses; and the benefit received by the scholars will awaken a general interest in the full courses; which are too extended for work in a public school. Remember that the more the interest grows, the more chance you will have of succeeding.

Little Lectures.

TO be delivered by the teachers or others who have classes and wish to aid them as much as possible in the mastery of this important training. The mind of the pupil must think; and the more it is made to think on the very subject that is under way at the time, as, for instance, the exercising of the body, the greater will be the interest taken in the work. Mere talk is not a lecture. Mere advice is not enough. The suggestions made should be timely and applicable to the occasion or to the principles involved in the training.

The Little Lectures that follow are sufficient in themselves; yet they may be used as types of other lectures if you wish to extend the number. They provide for twenty-five sessions, one lecture at a session; this will comprise a term of eight weeks, or two full months, allowing three sessions a week. If you are traveling from place to place, merely instructing classes, who propose to learn from you how these movements are performed, especially if you have graduated from Ralston University of Washington, D. C., and understand the many beautiful variations, all you need do is to show what each exercise requires and see that the classes fully comprehend them. In such case you could hold daily sessions for four weeks; and, after you are gone, they could develop the movements at their leisure, say by holding sessions three times a week or less. If your stay is thus limited you could deliver the lectures, one at each session, and omit one lecture or give two on the same day at the close.

It is better to memorize them and to repeat part at a time, during the brief periods of rest between the exercises; but the pupils should not be allowed to sit for more than a minute at a time, as they will get chilled, and thus offset the good work already done. This is important to remember. A skilful teacher will not be guided by personal feelings of weariness or comfort, but must study the faces of the class and determine whether they show the need of action, relaxation, or rest. In every hour there should be twenty brief sitting periods of ten seconds to a half minute or minute each. Here will occur the little opportunities for delivering the lectures, apparently in an informal manner.

“WHEN TO EXERCISE.”

This question is daily raised a hundred times, as it seems, in one way or another, by Ralstonites who communicate with the author. The inquiries are both interesting and instructive, chiefly for the reason that they show the varying motives of the individuals who seek information. For instance, one wishes to know when to exercise with relation to the periods of eating; how long before, or after a meal; and whether the stomach should be empty or full. Another desires information on the question of what time of day is best suited to exercising; is it morning, noon, or night; or are there certain hours that are to be preferred? Another wishes to know if there are times with reference to periods of illness; is it advisable to practice soon after recovery, or when feeling ill? Illness is of many kinds, is due to many causes, and shows itself under varying conditions. A chill and its opposite are the extremes perhaps. In some instances, exercise if properly performed will eradicate the disease that is seeking to gain a foothold; but all these matters are discussed very thoroughly in the work entitled “RALSTON DOCTORS.” We are called upon at this place to consider the question of time as related to the hours of the day or in reference to the periods of eating. Two good rules are worth bearing in mind in this connection: First, the time to clear the system of waste matter is when there is no food in the stomach, and the morning hour is best, especially if the breakfast is delayed a while; second, the time to build up a new body, little by little, part by part, is when there is some food in the stomach, or soon after the blood has taken it up. If the meal has been moderate, and composed of the most wholesome foods, it is best to go into the exercises about a half hour after eating, or even sooner; with the lightest movements first, followed gradually by the heavier ones. When the stomach is overloaded, rest is the best thing for it, although a few gentle but large movements in physical culture have relieved the distress and set the digestive process going, when it seemed blocked by the pressure. Exercising on an empty stomach is generally bad, if there has been more than four hours lapse since food was taken. It serves no purpose except to break down tissue, eliminate waste material and clean out the system; but what is the good of doing this if new matter is not forthcoming to take its place? Activity excites the part involved, attracts nutrition to it, and expects to find the blood and flesh ready to give up its valuable merchandise; but when the stomach has been empty many hours, the effort to build will prove a dismal failure.

“HOW TO EXERCISE.”

The mood of the hour has something to do with the manner in which exercises may be performed; but the good judgment of a thinking person may make the mood. A lazy, languid, careless mind needs muscular vigor to set the blood traveling into the brain, where the deficient life stagnates the whole nervous system, warps the judgment and inverts the daily habits of existence. The need of resolution is at once seen. In the case of indolent children, the parents or teachers are supposed to furnish the decisive determination that sets the machinery going; but adults are their own masters and will not allow others to dictate to them. Argument will appeal to some; the hope of health to others; the advice of a physician given in no uncertain tones, has its due weight in still other cases; but the inward discovery of the crying need of action in and among all the faculties of the body, makes the best type of subjects for the blessings of a true system of physical culture. Assuming that the start has been made, there comes the danger of the loss of interest through a clumsy and faulty beginning; for if the child is made lame, the parent will frown upon the whole thing, and if the adult is made lame, the soreness that follows will be charged to the wrong cause. This we deal with quite explicitly in another article in the present series. When the laming period is passed, the next cause of discouragement is in the weariness that attends a careless method of performing the movements. This is as much due to the fault of the teacher as of the pupil. The latter may turn any beautiful action into a wearisome strain, by racking and jerking the body about. Where there is no music, the bones and muscles do not work smoothly of themselves, unless the pupil is quick to see the value of steady, sweeping, gliding motions. Even the most intense exercising need not produce the jerk or jar that is so often seen. A blow is rarely called for in physical culture, but it serves its purpose as a means of developing health; yet it need not strain the muscles as is too frequently the case. The human body is a machine, having attributes and qualities of the highest value. Like a perfected piece of machinery, it should not work with jerks, thumps, straining or tearing action. The greater the power the more evenness and smoothness should be given to every movement. No muscle should feel a strain. No quick action should tear at the part of the body from which it is impelled. A forward movement of the arm, if violent and jerky, will produce lameness at the shoulder-blades and

along the spinal column clear down to the small of the back. The same kind of a jar that will weaken the value of a machine, will defeat all the good that exercise, play, or even work might accomplish.

CARE OF THE BODY BEFORE EXERCISE.

There are some conditions under which exercise should not be taken, and we will mention them in connection with the topic under consideration. The body requires some care both positive and negative. On the latter side it is well to remember that physical fatigue should not precede physical culture. The mind and nervous system may be exhausted, as the phrase goes, and muscular exercise, if well varied, will produce relief. The same is true if a person is fretted or wearied by toil of any kind; one line of balanced physical effort will remove the tired condition caused by another. But when fatigue ensues, a rest is needed. The most satisfactory results are obtained by five or ten minutes of quiet, lying down, prior to taking the regular exercises. The body should be as clean as circumstances permit. Some are not able to take a bath within the hour preceding the exercise; but may do so in the morning. The skin should be as free from dirt, or accumulated perspiration, as possible; for the channels of exudation should be open and free. Out of them will pass the poisonous matter that causes ill health; and its successful deliverance is of prime importance. Many persons go into physical training, intending to bathe afterwards, which is a good idea, if it is a secondary bath; but they perform the exercises with the skin clogged by flesh soil; and the pores that are forced open are met by the foul matter deposited on sticky underclothing; and so no good is accomplished by the exercising. If but one bath can be taken it should precede rather than follow the hour of training; and a brisk dry rubbing down may come after. Not only is it important to have the skin clean and pores open, but the blood should not be vitiated by a long period of abstinence from food. Exercising on an empty stomach results in destroying much of the reserve nutrition of the body without renewing the supply, because fresh and wholesome food is not at hand to make blood. Elimination follows physical effort of the right kind, but when the stomach has been long empty, the loss goes too far and invades the vital stores, besides drawing the poisons from the ordinary channels of passage into the better flesh. On the other hand, it is unwise to exercise heavily

when the stomach is overloaded and digestion requires all one's vitality. Extremes should be avoided in all things; in eating as well as in exercise.

CARE OF THE BODY AFTER EXERCISE.

With all the knowledge accredited to the human species, there is a doleful lack of sense in matters of hygiene; and nowhere is it more apparent than in the care of the body when overtaxed or overheated. To be exhausted from great physical exertion, is to be in a low vital state. One cannot read, write, talk or even think; although mental weariness, or nervous depletion may often find relief in muscular exercise. When the physical body is all tired out, everything else follows; and this is because the tremendous consumption of energy has reached the vital centers and robbed them of their wealth. The thing to do is to keep the pores open by a vigorous dry rubbing, using alcohol on any parts that are lame or tender. This should be followed by extra heavy clothing, so as to maintain for an hour at least, the temperature at which the practice stopped. This is uncomfortable only to those who are in need of a bath, or who wear coarse irritating undergarments next the skin. The millions of processions of effete matter are passing out at the pores while the heat is maintained; and to check it in less than an hour, especially to sit in a draft or any place where the cool atmosphere will drive away the heat, is sure to do injury to the blood and skin, as it imprisons the poisons at a place where they will set up dangerous conditions. It is much better to leave them in the interior channels, than to call them into the skin only to be shut up there. The third essential in the care of the body after exercise, is to secure a proper amount of rest. When the system is quite tired, all functions should be kept in a quiescent condition. But a stronger reason exists for taking a rest after any effort of the physical body. Assuming that the blood is well supplied with new food from the stomach, and of a nature that is wholesome, we see the process of tearing down the old tissue by scientific exercise, accompanied by an invitation from the general structure for a new supply of material, which must be interwoven in the fabric of life. The loss of the valueless parts and the demand for better substitutes by the stimulation of exercise, must result in the energetic activity of the blood which hurries on in its course, bearing the freight of rich

nutrition to be deposited and absorbed where most needed; and this rebuilding is wonderfully helped by rest and even repose. Therefore an hour's relaxation is one of the most beneficial measures to adopt after a period of physical culture.

RELATION OF FOOD TO EXERCISE.

One of the most important laws of health is involved in the subject now before us. In the start, it is necessary to admit that the influence of the old school is still alive; and the doctrine of hard exercise on an empty stomach, a remnant of the depletion theory of bleeding the body, is yet believed in by many; and occasionally a doctor of intelligence advocates it. The facts, as sustained by experiment, do not warrant any such principle. The argument, or process of reasoning, by which doctors were able in times past to convince themselves of the necessity of removing a large quantity of valuable blood in order to cure any and every malady, seems to be alive in the methods advised by modern hygienists; but it is argument merely, based on wrong assumptions to begin with. A fact, when established, is a safer guide than an explanation of a blind theory. So with the question of the relation of food to exercise. Theorizing individuals tell us to exercise first and supply the nutrition afterwards; and they cling close and hard to this doctrine, as though the reputation of a lifetime depended on its acceptance. Fact tells us that the body is an engine, whose best supply of fuel should be on hand at the time the engine is running, and not to be called back out of an already deficient blood. It is generally true that hard exercise not only makes inroads upon the flesh structure and physical strength of the body, but it also depletes the magnetism or vitality of the brain and nervous system to such an extent as to deprive the digestive organs of their power of assimilating food. It is one thing to have nutrition go into the stomach and out again; but it is quite another to have the blood take up the food values for the purposes of circulation; and still another thing to have the flesh-tissue attract such value from the blood after it is in circulation. To maintain these three conditions implies perfect health; yet not one of them can exist when the stomach is empty after a long period of abstinence, as from evening till morning, or from morning till evening. The most valuable of the wholesome foods should be

made the foundation of scientific physical culture. To exercise when a shabby meal has been taken, as of white bread, cake, pastry, fried potatoes, or similar trash, is sure to prove useless. While it is wrong to practice heavily with the stomach overloaded, it is true that the nearer to the meal the faculties are employed, if the meal is composed entirely of wholesome food, the stronger the faculties will become; and this law holds true of every department of the body, mental as well as physical.

DANGER OF OMITTING MEALS.

When it is known that the life in the body consists of a continual change, the cessation of which means death or such loss of vitality that the organs are weakened, it will be understood why two great processes are always needed to keep up the manifold details of the change. The first of these processes is the supply of nutrition; the second is the removal of the waste. Attending the former, there must be a demand that arises from use of the material already on hand; attending the latter there must be a burning up of the matter which constitutes the waste, before it is in a condition to be removed. By that endless circle which nature has endowed with the duty of making life possible, the action of burning is the action also of exciting a demand for the supply. Omit this, and everything is clogged. The power that destroys is the same that builds; and both must be fed; for they are two activities in one. Rest, in the sense of relief from over-weariness, is one of the most necessary things, yet it is not the rest of decay, but of opportunity for rebuilding. A body that is well supplied with nutrition will go on with its work during the refreshing hours of sleep; for we suppose that the day has been one of action and supply; but, if it has been one of idleness and poor selection of foods, sleep is neither refreshing nor helpful. Disease comes soonest from rest that is not a period of building and repair. To suppose that something can be built out of nothing; or that a repair can be made with no material, is the height of error. When we learn that the body is just like a machine, with the difference that the engineer lives in it as a part of its construction, we will quickly learn how to take care of it better. It is just as easy to build a part of a machine out of nothing but air and unconsciousness as to do as much for the body by mere sleep and emptiness. The old saying, give the stomach a rest, means two things: In the first place,

it means that if the system is over-full of nutrition, no more should be taken till the surfeit has been properly disposed of; and, in the second place, it means that if the system has become clogged by the use of injurious food, as rich cake, pastry, and the like, the stomach must have rest in order not to throw more debris upon the ruin already established in the digestive department. In both of such cases rest is the first essential; for the engineer has been absent from the post of duty. His good sense, if he ever had any, has failed to act. Out of such gross indiscretions, many deaths have come to those who boast of their unvarying good health. In ordinary cases it is injurious to the health to omit any needed meal. This omission comes when the stomach has been made too tired to receive food; or a late dinner or evening meal, taken after action instead of before, is an incubus that destroys all feeling of need for the next morning; and from these two omissions comes the long train of stomach maladies. Yet, nevertheless, the system requires nutrition which it is not getting. It is just as logical to crowd a boiler with too much fuel at one time, and give it none at another, as to adopt the same folly with the human body. Regularity, in the sense that a steady supply should be furnished for all needs, is the best mode of preventing disorders of the stomach. When a single meal is omitted, you run the risk of neuralgia, headache and blood weakening, which leads to rheumatism and other troubles.

“WORK AND INDIGESTION.”

A good bit of old-fashioned advice tells us that the man or woman who toils can digest most anything. It is true that work makes the demand on the blood and its nutrition much greater than idleness is capable of doing; and this demand from the muscular system for more of the food that is contained in the blood causes the latter to call for an increased supply at the stomach, by which means it produces what seems to be a better appetite. Digestion, however, needs not only a demand for the nutrition contained in the food which is to be digested, but it requires also the vitality which a buoyant nervous condition alone can give, and the open activity of life which is drawn from plenty of oxygen in fresh air and the brightness of a sun-lit day. The man or woman who works hard, accomplishes the first; the old matter is destroyed and a demand is

created for more food. As against this advantage, comes the serious objection that the toiler does not free the system of effete matter so freely by bathing, cleanliness and frequent changes of under-clothing, as the sedentary person; and the dead matter is thrown back upon the blood, the liver stagnates, and organic troubles ensue, leading to biliousness, chills and fever in malarial localities, and a clogged stomach. Then, again, the worker comes to the table too often exhausted, and the nervous powers of digestion are depressed. Some of the worst cases of dyspepsia are found among those whose physical activity, carried right up to the moment of eating, has absorbed so much of the vital-fluid of the nervous system that the stomach has insufficient power to accept and assimilate food. True hunger must be based on a buoyant demand of the nerves that carry on the process of digestion; and their buoyancy does not exist if a general weariness prevails. Work causes indigestion when it tires too much; and even exercise, study, mental strain, worry, or other matter that may weaken the spirits, will do injury to the stomach. A rest should intervene. Never go to the table weary, and think to gain anything by eating. The caprices of appetite, the high seasoning, the abandonment of plain food for the limited scope of relish, are sure to undermine every organ in the body; and that which is weakest will fail first. It may be the lungs, the heart, the liver, the kidneys, the general constitution, the blood, or the central source of it all, the stomach; but the cause and cure are located in the last-named place. Many kinds of work deform the stomach, for the reason that the toiler will not take advantage of what little diversion is possible. To sit, or to stoop continually, produces this deformity and consequent indigestion. Reading, writing, sewing, and many occupations may be varied at times, even if there is no change of work. Some of it may be done in brief periods of standing; and all may be so performed as to prevent the concaving of the stomach.

RELATION OF SLEEP TO EXERCISE.

Muscular activity differs in its own uses far more than is ordinarily known. Toil may employ all the muscles, but it always does so in some channel of action suited to the nature of the occupation; and thus certain sets of muscles are steadily used in certain ways. While it is rare that all the sets of the body are involved in

the activity of labor, except in the most general sense, it is not true that any one set is given its full employment; for it has many uses and there is no way known of calling them into action, except by a scientific method of physical culture. Toil fixes a few very limited channels of use, and the laborer, the housewife or the artisan, becomes a drudge, a sort of working-animal. This rut of living, no matter how varied it may seem, assumes habits of its own which sooner or later regulate themselves. In the case of scientific physical training, the first purpose is to employ every muscle in all possible ways, and every set of muscles in all their combinations of use; and to avoid the exhausting tax on the strength, while gently exciting every vital center throughout the whole body. Following the splendid work of this Ralston method of training, there are no evidences of weariness; for nothing but exhilaration is perceptible; yet it is true that this exhilaration requires support somewhere, and the best known method of renewing a generally taxed vitality is by a little extra sleep. This is recommended to all persons who use the present system of training. While eight hours is a good long period for one who is over fourteen or under fifty-five years of age, it is better to add an hour during the terms of regular Ralston practice. Thus if you take the exercises in their variety on Monday, you should sleep nine hours on Monday night; and, if you omit the practice on Tuesday, it will be sufficient to take eight hours of sleep on Tuesday night. Some persons take the exercise every alternate day or three times a week. Everyone knows that a few minutes of sleep in the middle of the day, or between eleven o'clock at noon and four o'clock in the afternoon, is better than an hour at night; but it is not good policy to sleep before exercising. After the practice is over, and the body has been given a good rubbing down, as they call it, and the clothing is heavy enough to hold the heat in until all perspiration ceases, a few minutes of sleep will prove a string of richest pearls in its effect upon the health and especially upon the complexion. If you cannot sleep, you can doze or rest idly, which is almost as good. The chances are, however, after a few days trying, that you will readily fall into a sweet slumber.

“CAUSE OF LAMENESS.”

While it is not possible to exercise muscles that have become weak from lack of use, without causing some lameness, it is not a

sign of a skilful teacher if the pupils are left lame, sore and sick after the first lesson or two. This subject is, perhaps, the most important one in the whole scope of teaching physical culture. A careless instructor is content to rest on the general and well-known fact that all exercise that is beneficial is sure to tax the muscles to an extent sufficient to make them lame; but even this does not justify any unnecessary soreness. We know that all athletes dread the first day's practice after a winter of rest. This is especially so with base ball players who do not keep up their exercising all winter; they think it all right to jump into the heaviest part of the playing on the very first day of the spring practice, and as a consequence they get very lame and sore. So we see that the amount of previous exercise does not count when there has been a rest of the muscles. Sedentary persons have rested all their lives, since childhood, and have much weaker tendons and tissues to be affected; and these little fibrous cords are easily torn by violent action. One man so hurt his shoulder muscles by trying to strike a servant in a fit of anger that he was actually sick from the tear and ripping of the small tissues all along the back, where the strain was most severe. While the cellular structure of the body must die and be rebuilt every minute, in order to sustain the power of activity, it is not wise to tear away the framework of this structure, as is surely done by violent exercise or work. Some of it can never be made again. Of course, the effect is very slight when compared with the whole bulk of the body; but it does not require large nerves to cause great pain, nor large tissue to feel the loss of a constituent part of the general anatomy. The first exercises should be taken so easily as to present a gradation between the ordinary efforts of life and the new tax that is soon to be placed on the muscles. By ordinary efforts is meant what the individual does every day; such as standing, sitting, walking, possibly stooping to pick up something that has been dropped, and very likely lifting things, although not of much weight. The most sedentary of individuals will do something each day, if no more than to lift the feet to another chair, or to raise the hand to the mouth. If there is absolute rest there is death; and no doctor and no medicine can do aught for the unburied corpse. It eats, sleeps, breathes, and talks; but it does not live because of these things. Chesterfield, deprived of the political power he had enjoyed, said he was dead for twenty years before he stopped breathing. We must assume that all persons, except the ultra lazy or ultra tired, which is

the same thing, are given to some degree of activity; and it is from this beginning that the teacher must proceed by easy gradations to arouse the action of the muscles; and there is a process so steady, yet so free from violent effort, that not the least harm will be done, beyond the common pain that attends any unusual exercise, as a long walk or a shopping tour with its vicissitudes.

“RAPIDITY OF ACTION.”

A slow movement is tiring in proportion to its slowness. There is less output of energy; and, for this reason, the argument seems sound that it is therefore less wearing. But another law comes into play; by which we learn that the life that supports any exertion of the body must inspire the vitality which takes its place for a future repetition of the action. A slow motion is incapable of inspiring such vitality; unless its slowness is attended by great magnetic tensing. In such case a still attitude is enough. Slow walking is very wearisome. A valuable experiment shows that a person can walk five miles quickly, with slight intervening periods of rest, producing less fatigue than a mile will cause if the pace is deliberate. The explanation is found in the fact that slow walking cannot arouse the vital centers of the body; while every quick step will create more energy than it consumes. From the list of exercises that involve speed must be excluded those that tax the limit of support of the weight; such as dancing and running. These do not produce the renewed vitality; for it requires too much vitality to lift the body each time in the running step, and the very organs of life are shaken and strained by the act of running. Nor would a quick ascent of a flight of stairs renew the energy that is lost; for the very reason that the whole weight has to be lifted in each movement. A rapid walk will do wonders for the system, especially if it is out of order or is sluggish from lack of action. Laziness has been completely eradicated by the cultivation of the habits of speed as means of exercise. Nothing will drive that tired feeling away so soon and so effectually as speed of motion. If a person is not strong, or is subject to heart disease, it is not advisable to teach even the walk at first; for there are movements that do not require so much tax on the vitality as the walking. Any of the rapid exercise will do; and the simplest should be tried first; such, for in-

stance, as the first or rotary motion of the hands. The rapid arm movements are especially valuable in their inspiring effect on the centers from which come the power and energy of life. The most tiring of these speedy exercises are those that require the whole weight to be moved rapidly and they should be avoided till the vitality is assured. We have known persons who are accounted invalids to walk a dozen steps with great speed just before a meal in the morning, and drive a severe headache away in a minute. Sometimes it is not easy to warm the blood, and a quick motion repeated will soon arouse it, while a slow activity, no matter how long continued, would be of no use. We have heard a father tell his daughter to exercise and she would soon be warm; but her method was the slow and spiritless style of moving the muscles, which accomplished nothing. The law of rapidity as a means of inviting new vigor to the blood through new life to the nervous centers, is now a well established one, and it will pay a large interest to observe it. No day should pass without some few minutes being devoted to rapid movements, if you wish better vitality and better health through better blood.

WORK IS NOT PHYSICAL CULTURE.

Many persons are heard to say: "Oh, we do not need physical culture; we get exercise enough in our work." While it is true that sickly and sedentary persons need physical training more than those who are active in daily life, it is wrong to suppose that work takes the place of such training. Let us examine a few of the important differences between the one and the other. The artisan works. Even in all the variety of the least monotonous occupation, he runs in a fixed channel the very sameness of which develops automatic habits from which relief is a necessity. Most toilers are not thus favored. The continuous repetition of one kind of muscular employment deprives the organs of their life-drawing vitality; for they quickly accommodate themselves to habits and do not depart from such tendencies until aroused. Muscles are pliant ropes when worked in all the directions which nature has made possible; but when given limited though varied uses, they lose all elasticity for other action. Thus the farmer who has to bend the knee without much opportunity for balancing that action with other movements

of a diverse nature, is seen to be crook-kneed; his legs are angular; and it would be a matter of some difficulty to give him a graceful carriage or even a fairly graceful walk. In his occupation he stoops; so his back is bent and the curve is a fixed one. His hands grasp implements, which require the crooking of the fingers and their joints. These are carried to the grave in their bent condition. Work is of all kinds; yet it is never so varied that it furnishes a counter-balance for the over-tax it imposes on certain sets of muscles; and, when all sets are used, they are given no opportunity whatever for the reaction which training alone can supply. Play is considered better than work as a means of health; and this is true when it is not attended by the evil influences that so often creep into its methods; as, for instance, the excess of enthusiasm that takes away too much vitality, the exposure to a low temperature when the heat of the body is uncomfortable, the disappointments that follow defeat, and the tendency to overdevelop certain muscles while the others are left to yield up their own strength in behalf of the former. It requires the best of judgment to turn play into physical culture; and, even then, an all-round balance will be found wanting. Yet as between work and play, it is clearly proved by experience that the latter is to be preferred as a means of inviting health. A true system of physical culture will include the play impulse, avoid its disadvantages, and furnish a complete balance to each of its many movements. All physical work wearies through its inadequate rewards; all play is profitless; and there is no satisfying use of the faculties of the body except such as may be found in a true system of physical training.

“BICYCLING IS NOT PHYSICAL CULTURE.”

It would be foolish to assert that this form of exercise is worthless. To a person who is free from disease of the heart, the liver, the kidneys or spinal affection, there is benefit in a moderate use of the bicycle. It is beneficial when it brings a sedentary or lazy person out into the open air, and starts a circulation of the blood that would otherwise be stagnant. Even then, to be an advantage, it must not be used too long at one time, nor too much in the aggregate; for no person is so miserable after the age of the bicycle has passed than one who has suffered the body and its organs to grow

into the deformity that is sure to come from the excessive use of the wheel. The injury to succeeding generations will be far more pronounced than is now supposed. In spite of the unbalanced minds that are led away by their ultra enthusiasm for this kind of amusement, it must be said that there are more arguments in favor of using the bicycle than against it. The wise will make that use reasonable; the unwise will in time be unable to use it at all. Yet the wheel is not capable of giving the benefits of health and adjustment of the vital parts that are sadly out of harmony in an invalid. It can do something; but not all, and in fact very little. One line of work or of play is sure to result in one kind of muscular habit. It is not true, as is sometimes claimed by those who are interested in the sale of bicycles, that it will develop the whole body. In the first place, it does do the very thing that is most required, namely, place the human body in the alignment of an erect and godlike position, where the center of gravity is carried in the only poise that denotes the gentleman and the lady. No true exercise can long depart from this most essential requirement. The bent body and the curved spine are in harmony with a rolling gate, and not in any way a part of the noble walk of a graceful, queenly woman, or a virile man. The exercise of pedalling with a continuous circle of the feet is less than one per cent. of the activity that the body needs; and, because it shakes or jars the whole system, is no reason why it should be claimed that it is a general form of exercise. Walking does much more to tax the whole body, but is not by any means a complete system of training or development. One can scarcely do anything that does not involve the muscular structure of the body, even from the act of getting up out of a chair to that of running up stairs; but such movements are small parts of the balanced attention which sets of muscles need in turn. There is more variety or action in almost any one of the Ralston movements, and more real benefit to the health, than in all the combinations possible in riding the bicycle. Without balancing the exertions, by which they are made to attract the nutrition to one portion of the system after the other, it is useless to hope for any real growth in solid health. The fact that wheeling brings one into contact with pure air, as it generally does, is the greatest presentation in its favor; and that fact has often counter-balanced severe injuries that are held dormant for a while, thus allowing a temporary benefit to overshadow a permanent danger. No one line of exercise is capable

of developing the body or of bringing health. Add the pure air that the bicyclist gets to the advantages of a more reasonable method of training, and good health is the certain reward.

NECESSITY OF RELAXING.

All systems of physical training have been deficient that have not included the devitalizing or relaxing movements. The idea is comparatively recent. To attempt to take exercise while the body is relaxed, or any part of it is not vitalized, leads to weariness if persisted in for any length of time; for the reason that the life-fluids are withdrawn; but to continue in the right way without relief is equally disadvantageous. For instance, if the arm is to be moved it should be set strong and vigorous; and this is called vitalizing; but if it is moved for any reasonable length of time, even in all its variety of action, it becomes stiff. This stiffness is a step toward crudeness, and soon takes away the grace and flexibility of the arm. Pliability is lost. A further disadvantage is in the overwork of the tissue structure, which allows no time or opportunity for rebuilding that part of the body. Relief is necessary; but it is not the relief of rest and inactivity. It is the relief of action so performed as to call the life and blood out of the arm into the centers from which they have been sent by the will power. This is called devitalizing, or relaxing. In it is a great law of health. The difference between rest and devitalizing is this: The former takes the muscles as the exercise or labor leaves them and allows them to remain more or less excited under the strain that will still be felt for some time after the action ceases; while relaxation keeps them moving as the blood and vital energy are withdrawn. This prevents stiffness and deformity in the new structure; for something is being rebuilt all the time. Devitalizing is the same as relaxing; and sometimes the word decomposing is used, but is not likely to become popular, as it has other meanings. The will-power determines how much of vital energy may be put into the exercise, and also how much may be withdrawn. The arm that is powerfully tensed for a blow may fall as though dead, if the mind so determines. The power of strength hardens and stiffens every muscle that may be employed; and grace, flexibility and repose cannot be fully restored except through the movements that devitalize or relax. Most athletes are exceedingly

nervous and some are the acme of awkwardness; all because they have never heard of the law of relaxing. They feel sure that rest is sufficient. Yet they know that rest, following strong muscular action, will not only harden and stiffen the parts but will lead to soreness through the sudden change of temperature that succeeds the extra heat of the body. Some attempt to cease all action immediately, take up the plan of rest without intervening activity, and even cool off quickly; and these pay the penalty of such indiscretion. Professionals know that all these direct changes are wrong; yet, with their rubbing and sponging, they have not yet learned that to call the energy and vitality out of the muscles by actual movements is the surest way of balancing the work done by the exercise.

“WHAT IS MEANT BY IRON LEGS.”

When it tires a person to stand still a reasonable length of time, or to walk a reasonable distance, there is fault either in the health or general vitality of the system. It is true that standing or walking may be always strained, as when the poise is crude or deficient; or may be always tiresome, as when the otherwise abundant vitality is sapped by serious faults; but, apart from these common causes, it is equally true that sickly, weak, weary, or sedentary persons cannot walk very far, and are unable to stand on their feet as long as they can walk. They prefer to move about rather than endure the torture of standing five minutes. The opposite is not always true, that the person who can endure standing is in good health or vitality; but it is generally the case, that those who do not become overwearied by long standing have an abundant vitality on which to build the best of health. The legs are taxed with the duty of supporting the body in entirety. The waist supports all above it. The neck supports the head. One class of persons are too tired to stand; another, too tired to hold the chest and upper half of the body in position, being too tired to sit straight; and the third class are weary in the neck muscles, causing a stupid, sleepy feeling to possess the brain, which always follows a relaxing of the muscles at the neck. One great fact that most persons do not understand, is that when the legs are strong enough to support the body, the upper depressions cease. The muscles of the legs are most easily strengthened; they respond to almost any demand that may be made upon them;

and it requires but a few days in most cases to pass from a state of low vitality to one of great power. It is a good rule to adopt, to compel the legs to acquire a reserve-fund of over one hundred per cent. of strength, so that they can never become exhausted by the greatest tax that can be imposed upon them. This is what is meant by iron legs. Let them be endowed with an excess of power, and the waist, chest and neck will likewise grow strong. It is only when we sit that the muscles of the torso show weakness; and the tendency to lounge and recline is rapidly increased. A well-built, vigorous man spends most of the day in a chair; his back needs more support, the feet are thrown on another chair in front or on a table, and the organs of life lose their vitality. He soon complains of indigestion, torpid liver, weak heart and bad kidneys. Nature made him to stand on his feet one-third of his life. He cannot stand ten minutes at a time without suffering from weariness. The art of curing many of the chronic illnesses is not very far removed from the art of maintaining an erect attitude hours at a time. To make both legs strong, they should be gradually developed by the severest exercises so that no violence is allowed. Then the whole tax, previously placed upon two, should be placed upon one leg, until it is just as easy to stand an hour as it is to lie down; and far easier than to sit.

“VALUE OF POISE IN EXERCISE.”

There is an important law underlying every movement of the body, whether in walking, running, playing, working, or exercising. It is the law of poise. To the dancer it is everything. To all persons it draws the line sharply between pleasure and weariness in everything they do. The body, being a biped, is not supported as a chair or table may be; or as a four-footed animal stands. We know the uncertainties of a three-legged stool; but remove one of them and note the difficulty with which it is made to do useful service. A quadruped with four legs, one at each corner, may rest by standing; a human being needs to sit or to recline; although there are some persons who do not become weary so readily on the feet doing nothing, as they do when working on a chair or bench. The only enduring position is that which avoids an effort to maintain the place of the center of gravity over the point of support; this should be accomplished easily and at all times. A dummy, such as

is seen in front of clothing stores, has a narrow base of support, yet broad enough to prevent falling, unless disturbed. When the center of gravity is not over this base, it is not possible to avert a fall; no strain of the dummy can shift the center. A human body, stiff with cold, might be made to stand on the two feet, if carefully placed; but, when the muscles of an active or live body are relaxed, as through fainting or exhaustion, it pitches forward and loses its line of support. We cite these instances to show how difficult it is for a person to maintain an erect position, even in strength; for the least weariness produces the tendency to fall, thereby calling for extra exertion to stand. A naturally graceful person not only maintains poise, but keeps the center of gravity over the *center* of support. This is the highest culture. It marks the man or woman of grace. Herein only is seen the movements of the perfect dancer. Exercise requires just that same fineness of support. Try a few changes of position as means of illustration, if you wish to see what is meant. Stand in the military position with both feet together, forming a letter V; then advance forward on the right foot, and note if the poise is perfect, if the central weight of the torso seems to be over the ball of the foot, and if the balance is easily maintained. Then step forward on the other foot; then to the right, then to the left; then backward on each foot alternately. To further test the poise, make steps in semi-circles, which are always difficult dance movements; then add strong physical exertion of the body. In time, if you are clear on these points, you will begin to adopt them unconsciously, and will pass into a finer state of grace thereby. Train the mind to recognize an error of poise, both in yourself and in others. Never let the center of gravity overpass the center of support; nor fall **short** of it; nor go to the right or left of it. When this does occur—and it is a universal error with all persons who lack culture of the muscles—the muscles of the waist, hips and legs will always be strained to maintain the body, thus adding continual unnecessary weariness to work, play, and exercise.

“RUSTING WHILE RESTING.”

The process of change is life. Growth depends upon activity carried to a certain degree of endurance and followed or intervened by rest. It is commonly supposed that rest is ordered by nature

for the purpose of making repairs in the body. This may be so considered, if we look at the matter from a general and popular standpoint. The real use of rest is to give time for the vitality to come back into the nervous system; for each cell and center is a small storehouse of electrical life. Exercise draws rapidly from these batteries the vital force of the body; but every loss is a stimulus which excites a greater supply; so that the use of a faculty is the means whereby its growth is assured. The body is not intended for a still engine. All through its countless avenues and paths, its myriad operations and processes, the vital current lives like streams of action, directed hither and thither in busy haste as though a million cities thrived in everyone of its varied sections. This unceasing activity is its life, and is necessary to its existence. Of course we understand that any over-straining is dangerous to the welfare of the whole or part. The teeming energies are not visible to the outward gaze; but if a microscopic man could inhabit the inward parts and travel about at will, he would experience the hum of a greater industry than would be apparent to a visitor in a city of endless factories. There is but one motive-power behind all this business of living, and that is its vitality. It increases by use, and grows less by disuse. Rest is not recuperative without the excitement of some kind of activity. A dead rest is not only useless but is dangerous. Extra sleep, or extra-solid sleep, serves to deaden the faculties; the person who sleeps ten hours at once, will awake in a stupid mood. When athletes have been engaged in contests that have deprived them of sleep, or when soldiers or sailors have fought or worked continuously for many hours beyond the period of the ordinary day's occupation, a long sleep is not allowed, owing to the injury it will produce. So a listless, lazy existence, long continued sedentary habits, lounging, lying down too much, lolling in a rocking chair, and a lack of enjoyment in physical activity, will lower the vitality and lead to a weak condition of all the organs, the blood, the brain and the nervous system. In every such instance you may see the invalid, despite the boast of health.

"BALANCE OF OUR PHYSICAL BEING."

The body is an intricate and complex structure, capable of thousands upon thousands of changing employments. No ma-

chinery invented by man is so simple; none so variable. This aggregation of bones, pulled by muscles which are driven by electric-vitality, is endowed with more kinds of action than any great dictionary could find terms enough to designate. It runs in all degrees of speed, all kinds of action, and all methods of step and energy; it walks in numberless styles; it jumps in directions, lengths and heights to suit the will; it lifts, carries, pushes, pulls, drags, bends, stretches, strikes, receives, rejects, caresses, fights, works, plays, and engages in every kind of occupation that the versatile mind can conjure up; and so many are its possibilities of change that a life time of eighty years would be too brief to enact them. Yet this multiform machine is allowed to run in some little rut, because an indolent will-power is content with the least efforts necessary to passing the day. Unhappiness clouds the mind in proportion as the physical being is deprived of its balance of activity. It is not enough that the man or woman works hard; the most variable labor is but a series of small ruts. The farmer uses the physical body over again and again in the same way; the busy housewife has enough to do, and changes enough, goodness knows, but it is the same daily string of employments, all monotonous and fixed. There are a thousand lines of change, all different from her own rut of existence; and she needs them. The laborer never relaxes to call the vital energies away from the set muscles; so they grow stiff and lose the spring and flexibility of life. It is dull work and dead rest to him, one alternating with the other. He loses his health and has a long series of struggles to ward off the very maladies that his very occupation ought to cure, and certainly prevent. The heavy course lines of work need a balance in the lighter and more delicate uses of the muscles. We laugh at the idea of sending a watch to the blacksmith to be repaired; yet the very reason why the smith is coarse, brawny and animal, is that he does not have the finer uses of his muscles, not because he cannot, but because he will not. One of the best types of balanced men, of well-formed men, of bright, brilliant men, was one who proved to his neighbors that the same hands that wield the sledge can repair the watch. The less we exert the body physically, the more we ought to do it; the greater strain of one employment, the greater should be the delicacy of another; the more attention is given to certain muscles, the more should be given to others by way of balance; and thus the vital equilibrium is sustained, and life grows stronger.

“EQUILIBRIUM OF THE FACULTIES.”

In another article we speak of the value of a balance of the physical being. In a far broader sense we now propose to discuss what is not confined to the muscular system, but to self as an organized existence. Muscles are simply the cords and belting of machinery. If you look into the factory-room, you will notice the wheels and shafting performing their work of transient activity to the machinery; generally through straps of leather or woven belting. The muscles of the body serve only to pull the bones about; the stiffness and solidity of the latter being responsible for the real value of the work. Strength is derived from the power of the muscles to contract and pull the bones from one position to another. The man who lifts a hundred pounds with his right hand and arm, must have that amount of strength in the arm-muscles, but they pull the bones up, and the latter must not break in the exertion. So the muscular system includes the bones, sinews, cords, tendons, and a fibrous interweaving of tissue whereby the muscles are made fast to their stiffer companions. This is about one-third or one-fourth of our being. Overuse of the physical part lessens the capabilities of the other departments. If a man has enough vital-energy to spare, he may use the muscular faculties to excess and yet maintain a bright, deep mind; but not for many years. The great scholars who have been athletes have maintained an equilibrium between mind and muscles, whereby the latter have stimulated and benefited the former, as is often the case. The brainy man and woman who have neglected the uses of the physical faculties have been morbid, sickly and of limited usefulness in the world. Here we see two sides of our nature. There are two others; the nervous, which includes the passional and the emotional; and the moral, which includes the philosophy of ethics either in or out of religion. Earth's greatest geniuses have maintained this four-sided balance; have lived long and useful lives; and have gone further, achieved more and given the world a larger heritage than the one-sided, or two-sided characters that have shed some sparks of brilliance. Washington was deeply religious; Webster was deeply religious; Gladstone was deeply religious; and so were thousands of others whose places almost touched theirs. Washington was an all-round athlete; Webster was an all-round athlete; Gladstone was an all-round athlete; in the sense that their muscular powers were kept constantly in full use, though chiefly

in exercise. Yet these three greatest men were of the loftiest mental stature, each in his own sphere. Health and longevity, happiness and success are dependent upon a constantly maintained equilibrium of the faculties.

INERTIA.

The most common fault in every life is that which we call by the name inertia; or the inability to do the right thing at the right time through a stagnation of the will power. It is seen most frequently in the morning, on awaking for the day. The quick leap that brings the body out of bed to the floor is not forthcoming, and time lags uselessly along. No particular injury results from this; but when the same inertia attends one in time of needed change of situation, and there is not the life or the will power sufficient to make the change, ill-health is the penalty. The body gets overheated through too much exercise, and something should be thrown over it to prevent a chilling, or it should be protected by gradually lessening the effort to a finish, or it requires relaxing of the muscular tension or energy, so that the excitement of exercise or work should be allayed as soon as possible. As some of this is too technical to be generally understood, it may be said that when the body is so warm as to be uncomfortable it should be cared for more than when it is comfortable; and this very thing is what the individual lacks power to do because the mind is not operative in its will department. A mother at a dance requested her daughter to move away from the open window; she said she did not feel cold, but would move in a minute, as she was busy in conversation with a very dear friend. She died of pneumonia in three weeks. The heat of a room becomes too great or too little; but the small effort that is required is delayed to the last extreme. The habits of the body are allowed to go to the bad, because there is not energy enough to perform the slight duties that make them better. This inertia is seen in nearly all children, and continues through life. Many a person has brought on chronic difficulties of the lower organs simply because it has required a little annoyance to leave some pleasant game, some interesting chat, or some novel, and go a short distance to attend to the duties of the body. A man of fifty said not long ago that he was now suffering from the neglect of his

previous years; the undoing of which cost him ten thousand times as much effort as would have been required in the times, all put together, when he could have avoided the harm by walking a few steps. Inertia is seen in every way. It is of the mind and of the muscles. In the study of the physical demands of the body, it is of the highest importance that every exercise be taken, and that no lesson is missed; for, in case they are too severe, it is possible to take them in a very slight degree, and thus prevent strain or weariness. There is no time in the month when a woman should not be able to exercise gently, and the more she can do this without taxing her strength, the less she will feel the effects of the efforts. Her reasoning works out to the contrary of her expectations. The same is true of men who feel weak; the more they exercise judiciously, the more they will gain of strength. If once the tired person, even the invalid, can be made to overcome the inertia that stands in the way of effort, the road to health is sure. The mind, however, is as indifferent as the body, and needs to be awakened to the necessity of paying proper attention to what is eaten, and what are the best habits of daily life.

DANGERS OF THE GYMNASIUM.

Going to a well-known gymnasium one day as a visitor, we were told that the modern idea was to avoid too strong muscular tax, owing to the permanent effects which were the result of excessive exercising. There are many views from which the question may be examined; and the defenders of gymnasium practice are either those who have an interest in the institution for financial gains, as teachers, promoters and owners; or else are those who have taken pride in organizing such institutions in their community, and who are unwilling to believe that they are at all injurious. When cornered by a long array of facts, they admit that excess of exercise is bad; and justify the excuse by adding that anything taken to excess is bad, as we all know. The trouble is that, when one is excited or over-interested, he does not feel the excess until the injury has been done. To understand why the severe and heavy tasks of the gymnasium are dangerous we must look at the structure of the body itself. We find it made up of bone, muscles, nerves, organs, and flesh material which we call tissue. All life is

fed from this tissue; and it is necessary to maintain it in as good a condition as possible. It serves as the storage ground for both vitality and nutrition. While, without doubt, it contains the fibres of muscles, it is quite different from the cords and strings which are popularly known as the muscles of the body; and they differ from the latter largely in the fact that they are flesh, while the muscles are mere toughened fibres. They are woven into strings as rope is made, taking them in a general sense; and they serve no other purpose than to pull the bones about. For each bone there are two muscles; one to pull one way, the other to pull the other. Yet there are men, and women too, who advocate the strong and over-taxing exercises of the gymnasium, when the first result is to develop all muscles over the chest, and drive away the flesh tissue, which is so much needed to supply the chest and lungs with vitality and to serve as a fund for transmitting nutrition to the vital organs. To increase the value of the chest, the lungs themselves must be made larger and more useful; for life and health are always coextensive with the condition of these organs. But exercise that increases the size and bulk of the muscles that over-lie the chest-frame, prevent the expansion and growth of the lungs themselves; and this is one of the most potent reasons why the athletes die of consumption. Among the supposed healthy classes, the death rate from this one disease is startlingly great in the ranks of athletes; they lead all others in mortality; and generally in the thirties. We recall the names of several young men of seemingly perfect health, whose parents had never shown any trace of consumption, but who thought that the gymnasium was the place for them, all of whom died of consumption in less than four years after commencing practice. They were in different parts of the country, being merely examples selected at random. Not only are consumption, weak lungs, and chest maladies sure to follow the practice of getting the chest into the well-known muscle-bound condition; but the destruction of the flesh masses will bring about the same result. The young man who points with pride to the cordy and brawny frame, may well look out for atrophy and consumption. Beneath that pile of muscles the lungs are stagnant and packed into crowded quarters. What is true of the chest is as well true of the entire body. No healthy person can take much comfort in mere muscles. If he wishes them to show, he might as well carry ropes and strings about in his pockets. This is an age of brains and executive

thought; and it must, therefore, be an age of balance in all the faculties of the body.

USELESSNESS OF APPARATUS.

Many dealers make a regular business of advertising certain apparatus for home practice, as a means of gaining health. Most of these are in the form of lifts, weights, pulleys, handles, and the like, intended to give opportunity for moving the arms, with the extra claim that the waist muscles are also involved in the practice. Much extravagant nonsense is added in the way of a multitude of supposed benefits; but, when the apparatus comes into the house and is put in place, the childishness of the whole proceeding is at once apparent; and very few persons spend the time in the idle efforts which are called for. One good free exercise will do more in three minutes, and tire the body less, than a year of this kind of feeble action of the arms and general body. Then there are all kinds of apparatus, from the simple affairs just mentioned to the varied forms of bells, clubs, wands, bars, trapeze, and what not, all having some special claim attached to them. When we ask why so much attention is given to inventing something to go in the hands, the answer is that it is necessary to tax the strength to its utmost, a thing which is not possible without apparatus. Both these claims are wrong, and untenable. In the first place it is not necessary to so tax the body that all the strength is required for any movement or series of movements. To do this is to break down tissue-structure that will never be replaced; leading to atrophy and consumption. In all exercise it is important that there be a reserve force always at command which is not to be used, but which serves as a background for the effort and avoids the extreme exhaustion that is so dangerous. On the other hand, it is not true that apparatus are needed to keep the muscles up to their highest limits; for we can name a score of movements, all free, that will require more strength and endurance than any apparatus calls for. In fact some of the Ralston movements were so severely taxing that teachers were required to avoid giving them to pupils unless they had shown more than ordinary powers of endurance, or possessed unusual strength. To prevent misuse these heavy free movements were withdrawn, as they served no real purpose, except to prove the claim that a movement without apparatus can be made

more taxing than one with the heaviest apparatus. Then it is apparent that nature has built the body on such lines that all and more exercise or physical effort may be given it than it really needs. A clear objection to the use of instruments of any kind, except perhaps wands, is the fact that they make the parts of the body grow to excessive size. In some cases the waist has been over-developed; in others, the hands; in others, the feet; and so on, depending on the instrument used, and how it is employed. A lady who had a strong desire to learn fencing found that, at the end of a few months' practice, she had to wear gloves three sizes larger. A society man took up the practice of club-swinging, and found that he had the same over-developing of the hands. It is true that, when there is an exact balancing of all parts of the body, of all sets of muscles in all kinds of ways, it is not possible for any one part to grow to an excessive size. This test has been made with the heaviest of movements; and the general distribution of action prevented the nutrition from going to any one part.

“LIMITS IN EXERCISE.”

There is a bright and a dark side to everything in life; and the dark side of exercise is found in the wearisome drill that is unrelieved after the newness wears off. This does not accomplish very much good. When a person has had some out-door life, or has once been accustomed to the strong use of the muscles, the absence of any practice is sorely felt in the desire to get into some degree of activity again; so the person is willing to stand and perform movements as long as the system cries for this work; and they feel better, those who do this. So there are invalids who are decidedly refreshed by practicing the exercises when the body is troubled with ennui. We like nothing better than a good stretch and some of the invigorating movements, which are included in the Ralston system; it is easier to think, to work, to write, to teach, to converse, to do business, after the blood has been sent coursing in vigor through the veins, as these exercises will surely do; and so they do not need spiriting encouragement or inspiring music, and a magnetic teacher. They are, of themselves, capable of creating all the enthusiasm that is needed. It is when we add music and the charms of rhythm that the danger is seen, as in the dance. A

young lady of weak heart and a good companion will out-dance her vitality that she pays the penalty in several ways. This girl says she is unable to walk, or do anything, because of certain trouble peculiar to her sex; and she is also very fond of dancing. We learn that health depends more on balance than on action; for one kind of activity will destroy the life while all kinds in complete balance and harmony will build it up. To dance is to carry all the weight in a vertical use of the muscles, which is exceedingly trying on the organic structure of women, when this structure must be lifted in its full weight clear off the floor as is done even in the most delicate methods of dancing, and is done a thousand times in one evening. But the music and the enthusiasm of good companionship are hard combinations with which to confront the good judgment of those who are ordinarily brainy and cautious. So in contests with others or with the ideas of the exercise itself, as when the individual seeks to know if the body is capable of performing certain difficult things, the interest will take one far beyond the limit that should be placed on the efforts of the muscles; for they act only by the energy of the vitality that is stored away in the body. The sets of movements that comprise the Ralston system of physical culture will tend to over-interest the pupil or individual who is engaged in practicing them; and the teacher must see that no one is allowed to go to this limit. It may be asked why we have presented a system that so holds the interest; and the answer is, that it is necessary to create all the enthusiasm that is found in the dance itself, in order to make the work pleasing and beneficial. All the pupils we have had, who have been dancers, have expressed the opinion that the pleasure of the practice of the present system of physical culture is even more fascinating than the best dancing. They, above all others, need that gentle restraint which is necessary to prevent over-exertion.

“THE RUDDY GLOW OF HEALTH.”

By this is meant that every person who is in health gives evidence of it in the condition of the blood in the face. Pale persons are not in possession of the required amount of blood to keep the body supplied with its needed vitality. Yellow faces show lack of blood and the contamination of bile that comes from the liver,

often entering the circulation through the second stomach and getting round to the stomach by the upper course of this fluid, much to the surprise of those who believe that bile cannot reach the upper or first stomach. Then we have what is called bad blood, not an insufficient supply, but an unwholesome kind, of which there may be too much. The Anglo-Saxon is, by virtue of his superior heritage, the possessor of good blood unless the sins of his ancestors have deluged it with the king's evil; a malady founded upon the wickedness of those who have had license in life. It is said that ninety per cent. at least of all men and women now inherit some of this disorder, as it is hard to find those who have not, somewhere in the past, had erring ancestors. This kind of blood is diseased. From it, in other combinations due to other causes, come the cancers, the sores, the abscesses, and the general impurity of the blood. There are millions of men and women to-day who are taking medicine for the purpose of eradicating these impurities; and the only evidence they have of the value or efficacy of such medicines, is derived from the specious claims of the advertisements, which the poor fools believe in because there are pictures and testimonials from prominent persons, either fictitious, bought, misguided, or partners in the scheme, who tell monstrous untruths about the past deeds of the vile stuff, the fearful poisons, the drugged concoctions which lead to worse maladies than they pretend to cure. Let us see, if in this brief article, we can impress one sensible idea on the minds of those who may read these pages, and are addicted to the habit of using advertised medicines. The blood cannot be created out of medicine; nothing but nutrition can build it up. Medicine will not make bread and meat; nor do any medicines on the market to-day, except a very few that are prescribed by regular physicians in good standing, contain any of the blood-making elements; and, even when they do, they are not the best means of building up the blood, for they are not organized foods. It is not possible to get vitality and life out of any food that is not of organic growth, whether in the animal or vegetable kingdom; and this is why the users of the patent food medicines always grow weak in the heart and have a scarce quantity of blood. Therefore, it must be understood that, in order to build the blood, there must be nutrition and it must come from foods that have been organized in growing nature, and not from minerals and chemical concoctions even from vegetables; for chemistry can

quickly disorganize the vital properties of vegetables. The so-called vegetable compounds and vegetable medicines are generally minerals of the most injurious kinds; but they may be from vegetation, and yet rank poisons. In order to build good blood, the old must be destroyed; and the only natural way, and the only safe way, is to burn up the old blood by the fires of the body. Fevers are constituted by nature to do this, and such is their only mission; but we do not need a fever to get rid of the bad materials in the blood. When an exercise has gone far enough to bring the ruddy glow of health to the face, that extra red in the hue is a sure indication that a conflagration is raging, and that the old blood is being burnt up. Now what is wanted is the good sense of the individual to tell him or her that pure, wholesome food must precede the exercise, so as to have good nutrition ready to supply the perfect in place of the imperfect; and here is the whole story of making new blood.

“VALUE OF MUSIC IN EXERCISE.”

We are all trained to rhythm even before we are born. The cord of life pulsates to a double rhythm; in the heart beats and in the waves of alternating variety. The peculiarity of this double rhythm is worth considering. An unborn child has its own heart action, and that of its mother. When a physician wishes to know if the foetus lives, he must listen for the movement of its heart at certain stages of its life; and he knows that he must catch that quick, slighter beat that distinguishes it from the even rapid pulsations of the navel cord that binds it to its mother's life. The child, then, has a double beat; and from this comes the double rhythm of the after existence, when it is a human being in the world. It will be noticed that, in respiration, the breath comes and goes without reference to the heart, and this may be ascribed very properly to the larger action of the diaphragm which is not capable of such rapidity as the heart. The breathing of perfect sleep is perfect rhythm. The beating of a healthy heart is in perfect rhythm. Yet in both these cases there is a modulating rhythm. Every fourth beat of the heart is regularly a stronger one than the other three, in some cases; and, in others, there is a fixed pulsation, either in lesser or greater number. All this is easily ascertained by listening at the heart of another, by placing the ear

upon the chest a little to the left of its center. So every fourth breath is stronger than the others; though in cases it is the third, the fifth or the sixth. Rhythm will set the feet in motion, will set the fingers drumming, will bring the body into action when all other methods fail. The child is attracted by a jingle that has this regularity of recurring sound; and it must always be sound. To the eye there is no such thing as rhythm; nor is there to the tongue, to the smell or to the touch. To see a thing regularly will tire the brain, and weary the sense. Sound is capable of dividing the brain into two uses; one that hears and does not know; the other that hears and knows. Thus we listen to sounds all day long that we are not conscious of in the thinking brain, yet know them at the time they are made. Thus we can hear every word of a remark, and not get an idea into the head. Thus we can catch all that is said in a speech, as in a sermon that is uninteresting, and not let one of its ideas go so far as the thinking brain. Rhythm does not appeal to the mind; but merely to the first brain that sound attacks. It will often set muscles going when we are not cognizant of the fact. We can do all that an exercise requires, yet not pay any attention to the inspiring cause of its rhythm, its regularity, and its earnest repetition. Here the great office of music is seen; for it makes us work with pleasure, and do all that is required without having to take the trouble to think of that most important part of the duty. Laborers can do more work with song than without. The heavy load is hoisted by the call of "Heave-ho!" sung in merry rhythm. The anvil rings out its ditty when accompanied by some cheerful air; and its music has inspired the beautiful and almost sublime "Anvil Chorus" of the opera "Il Trovatore." The drum gives rhythm to the marching troops, and the gayly playing bands, setting the air in motion by their martial strains, will nerve the soldier on to the impetuous assault, fearless alike of foemen or death. There is no nation that does its fighting without this inspiring power; leading the armies to the very line of battle, and then plunging them into the grand assault.

"BAD METHODS OF TEACHING."

Much depends on the teacher in everything; and fully as much is required of the person who attempts to instruct others in physical

culture as in anything else. It is not always easy to see what is needed in the process of carrying a class to a successful end in this line of development. As in every profession and in every line of business there are all kinds of minds and all degrees of executive ability, so there are successful and unsuccessful teachers of Ralston Physical Culture. Some fail because they believe the exercises will teach themselves whether the teacher is fitted or not for the work. They argue that, if the system is a good one, it cannot fail. They forget that poor music in the hands of a good musician is better than good music in the hands of a poor musician. No matter how grand the composition, if the would-be performer does not know anything about it, or has but a limited amount of knowledge, or lacks the brains to make the details intelligible, there can be but one result and that is sure to be failure. The first qualification of a good teacher is that the exercises be well committed to memory, including all their parts and variations. The next is to know the music and its movements as they apply to the details of each exercise. Sometimes the teacher will say that the music is in a certain time; and it must, therefore, be easy to catch; but the fact is, the music may be in the proper time, and yet the accent be quite contrary to the action of the exercise. Thus, there may be a thousand waltzes that have the time of the movement, but are not adapted to it. When the proper music is at hand, the next thing is to rehearse it with the musician till both he and the teacher are quite sure of the time and manner in which it should be rendered. A teacher must be familiar with the methods of the player, and this can be attained only by frequent rehearsal; and by untiring effort to come into perfect accord with each other's work. It is always a bad plan to go before a class unprepared; and the attempt to pass a poor effort off as a good one will not pay in the long run; for such a teacher has no staying powers. While before the class it is the duty of a teacher to not let anything go by chance or haphazard. Every pupil must be known, and the limit of the whole exercise at any one time, must be the limit of the strength of the weakest; with the provision that the limit must not be reached. There should be no tiring the class, or any member of it. The fact that most of them are able to endure the exercises even to a farther degree is no reason why one should be overtaxed; and to prevent such mishaps the pupils who need the most watching should be closest to the teacher. Frequent rests, very brief in time, should

be ordered. A long period of exercising, followed by a long rest, works a double injury; it over-wearies, and it allows the muscles to become stiff by the waiting. In order that the teacher should not judge the freshness of the class by his own strength, it is a good plan to try all the movements for an hour before the class, and thus be somewhat tired to start with; otherwise it will take a keen eye to discern the condition of the pupils by their faces. Exercises should not follow in the order in which they are presented in the book. That arrangement is necessary in order to know where to find a given movement.

This is the close of the big little lectures, as we call these at this part of the book. The intended course appears in the earlier pages, in the form of 102 half-page talks under the larger size figures of the exercises in physical training. We wish at this place to add a word of advice as how to best use the music in the present volume.

How to Use the Music.—You will at first find it difficult to get at it for playing; and if you are impatient or crude in your general habits, you will seek the remedy by cutting it out. This you have no right to do; and it is not at all necessary. Then will arise the inquiry, “How can the teacher conduct the classes if the musician has the music at the piano?” The answer is, that the teacher can never conduct classes by depending on the book for preparation at the time of teaching. It requires great familiarity, and this is attained by reading and re-reading many times the text of explanation; and the more ideas he has in his head from Ralston books, the more fertile will be his resources as a teacher.

The best method of teaching is to determine what exercises will constitute the lesson for each day; then write down on a piece of paper the number and the name of the exercise. The number will be given by you to the musician, and will at once refer to the music, which bears the same number as the exercise. You may not recall the nature of the movement; and that is why you should either remember it, or else have its name written down against its number. Let the book rest on the piano, and be held open by two other books at its side; or better, get a piece of iron 12 inches long, $1\frac{1}{2}$ inches wide and a quarter inch thick, covered with paper, and place it at the lower edge of the open pages. Under these methods it will remain open as well as any sheet music, and even better.

NAMES OF THE EXERCISES

IN

Ralston Physical Culture

AFTER two or three repetitions, any movement may be recalled by its name. As it requires much time to memorize numbers without associate ideas to help the mind to grasp the meaning of mere figures, we find it safer to know each exercise by some name, which can be quickly copied and seen at a glance. Even the pupils are thus enabled to catch the full idea by reference to such title. Ralston Physical Culture is based upon 102 movements, and their variations and degrees of action. Herewith we present the full system by name and number, the latter always making it easy for the musician to find the air.

1. First Iron Legs.
2. Swaying.
3. Front and Lateral Leg Bending.
4. Sitting on Heels.
5. Swaying and Lifting.
6. Side Sliding.
7. Rising on One Foot.
8. Rising on Toes.
9. Rising on One Toe.
10. Front Foot Circle.
11. Floor Foot Circle.
12. Floor Foot Half Circle.
13. Making V's.
14. Ankle Rocking.
15. Ankle Walking
16. Ankle Prying.
17. Ankle Swing.
18. Ankle Dance.
19. Front Knee Exercise.
20. Lateral Knee Exercise.
21. Back Knee Exercise.
22. Reverse Lateral Knee Exercise.

23. Kneeling and Rising.
24. Double-Kneeling.
25. Forward Hip Action.
26. Lateral Hip Action.
27. Circular Hip Action.
28. Cross-leg Hip Action.
29. Side Swing Hip Action.
30. Kneeling Hip Action.
31. Lateral Waist Action.
32. Inverted Cone.
33. Diagonal Waist Action.
34. Revolving Waist Action.
35. Walking Beam.
36. Kneeling Waist Action.
37. Breathing Action.
38. Chest Resistance.
39. Wing Action.
40. Perpendicular Drill.
41. Double Slapping.
42. Chest Semi-circles.
43. Rising Shoulder Action.
44. Forward Shoulder Action.
45. Right Angles.
46. The Great Circle.
47. Plucking Grapes.
48. Pushing and Pressing.
49. Revolving Arms.
50. Whip Lash.
51. Arm Quarter Circles.
52. Magnetism.
53. Flying.
54. Double Circle.
55. Hand Closing.
56. Double Hand Hinge.
57. Hooked Hands.
58. Palm Action to Chest.
59. Hand-clapping Semi-circles.
60. Happy Hand Action.
61. Forward Head Action.
62. Lateral Head Action.

63. Circular Head Action.
64. Turning Head Action.
65. Rolling Head.
66. Craning Neck.
67. Overhead Whole Body.
68. Neck to Knees.
69. Handkerchief Exercise.
70. Gypsy Camp.
71. Earth and Sky.
72. Turkish Salute.
73. Rapid Fist Circles.
74. Rapid Arm Measure.
75. Farmer's Warming.
76. Rapid Finger Circles.
77. Elbowing.
78. Ready to Jump.
79. Plain Light Step.
80. Lateral Light Step.
81. Running.
82. Rising Light Step.
83. Sailor's Dance.
84. Rocking Run.
85. Hand Devitalizing.
86. Foot Devitalizing.
87. Forearm Devitalizing.
88. Whole Arm Devitalizing.
89. Swinging Devitalizing.
90. Whole Body Devitalizing.
91. Ladder.
92. Bell Ringing.
93. The Anvils.
94. Mowing Grass.
95. The Miner.
96. Gardening with Shovel.
97. Childhood Skip.
98. Fencing and Gunning.
99. Wall Pushing.
100. Stretching.
101. Punching.
102. Pulling.

What Is Ahead?

DEAR RALSTONITE:—

You are now of the Tenth Star Degree, well settled and secure in your rank. This will never be disturbed. The advance of our great cause depends upon our members, of whom you are one, and, whether you are situated in a less favorable position in life than others, it is certain that you possess some influence if you have the courage to use it. The harder the chance of success may seem the more vitality of heart and mind will be acquired by fighting an up-hill battle. Ralstonism is spreading, and to our members belongs the credit.

Now that you possess the tenth degree and its splendid emolument, you are on the threshold of a great world opening up to you in a broader manifestation of splendor than has ever yet been dreamed of. We cannot now tell you all that this means, nor can you realize it in any one step of the way, but we will try to make it as clear as possible in the "NATURAL COLLEGE GUIDE," which is obtained with the Certificate of Admission when you reach the Fifteenth Star Degree. Kindly read both sides of the GOLD FORM which is attached at the end of this volume.

RALSTON NATURAL COLLEGE

is founded upon the important idea that true education is not of books, but may be obtained through some books, though not many. When a book is a collection of dry facts, abstruse ideas, processes of reasoning, and hard, intricate knowledge not in any sense a part of life, such a volume is a burden to the brain and a weariness to the heart. Too much of the education of school and college is of such a stamp; and very little real good ever comes out of it. The geniuses of the world have either escaped book-learning of that dry and technical sort, or else they have gone deeper and overthrown it. The towering giants of success have got close to nature in all their education. It is a rare book that reflects nature; that is the open portal to a knowledge of

real life; and in this age, when everybody seems to have run mad in printer's ink, there is all the more need for a safe anchorage in solid learning.

Ralston Natural College is a home course of reading, not study; but your interest will be so great that you will abide in the grand fellowship of the books. Not one of them is hard to read. Their information is so vital and so interesting that they will drive all the worthless reading out of your life. Think what this means. When the trashy literature has gone, you will have time to devote to the problem of succeeding better; of winning success if you lack it; and of enjoying it if you possess it. Think also of the stimulus such a college will be for the young men and women who are growing up in the worst habits of mental employment. The purposes of Ralston Natural College may be stated as follows:

1. To admit every person at the Fifteenth Star Degree, who seeks more substantial success and more real happiness in this world.

2. To present at the fifteenth degree a Certificate of Admission, and a copy of the "NATURAL COLLEGE GUIDE," which is a booklet devoted merely to unfolding the whole prospect of this new world.

3. To present at every tenth degree, from the twentieth to the one hundredth, a grand emolument, the total value of which is very great.

4. To make every such emolument a complete work upon some one subject, each distinct and widely different from all others.

5. To prepare every Ralstonite for the battle of life by the best training that this earth affords, and herein to excel every educational institution in this respect. We understand fully what this statement implies; we have long been at work upon this one end, and we are prepared to help men and women as no other influence can.

6. To present the successive volumes of Ralston Natural College in such shape as to make them unusually inviting and tempting; so that the mind will never tire of them, for they appeal to every faculty of the body, and are not of a nature to weary the brain. Knowledge, education, training, development, all are

going on without strain or struggle; and this cannot be said of any other work ever published.

7. At the end to grant the COLLEGE DIPLOMA free of charge to every person who has gone through the course under the requirements, and those who have not done so will be continually helped and encouraged until they succeed. Full directions are given at the fifteenth degree, which is explained in the GOLD FORM at the end of this volume.

Many of these great emoluments are now ready, but others are being prepared as rapidly as possible. Enough are now available to keep you pleasantly employed in your leisure moments. If you will notice the purpose of the books thus far prepared you will get an idea of the greatness of each and every one. Thus RALSTON GARDENS is in itself a complete world of health; while this volume, RALSTON CULTURE, is the most comprehensive and fascinating work of its kind ever issued. The more you use its wealth the more you will realize this fact, and if you were to be paid a million dollars to find its equal you could not do it. It cannot be found. Then comes a much grander work than either of these, and it is called

RALSTON CITADEL.

Why does it bear that title? Because it is a fortress of safety. When you entered Ralston Gardens of Life you secured the best opportunity for maintaining or restoring your health. In that garden there was a temple of culture which we have called by the title of this book that you are now reading. But upon the heights of that garden, commanding the view from every point of the landscape, towering above it all like a fortress on the hill-top in a country rich in conflict, stands a mighty citadel of safety. Why is it so-called?

1. Because the Ralstonite who enters this citadel is safe. Safe from what? Safe from every danger that can possibly arise in any way. This is a strong statement. But the citadel is a strong fortress. We realize what that implies. Years have been spent in the preparation of a book that can guarantee safety to every human being who comes under its influence. What we set about doing we accomplish. It was our order that such a book should be prepared, and here it is.

2. A man on his dying bed, in bidding good-bye to his family, said: "I wish I could know that my sons and daughters were safe." He meant much more than we can explain in these brief lines. How many husbands wish the same of their wives? How many wives wish this of their husbands? How many parents yearn and hope and pray for the safety of their sons and daughters? To be safe is the first consideration of existence.

3. Note the castles old that were erected to protect their lords and vassals in time of danger; they provided one kind of safety. Note the armaments of the nations of the world; they afford protection of a certain kind. Note the training of the young from the prayer at the mother's knee to the stalwart character of the indomitable will; safety is sought in this means of defence.

4. Ralston Citadel affords every kind of safety for the individual.

Safety against failure.

Safety against loss.

Safety against malice.

Safety against wrong habits.

Safety of character.

Safety against discouragement.

Safety in business, in the professional career, in every undertaking.

Safety in society, and the winning and maintenance of social position.

Safety in friendships.

Safety in the home.

Safety in every earthly relationship.

It is, perhaps, a peculiar book, but it is a great one, and it is such a book as is needed by every man and woman, every young man and young woman in existence. It carries you to the heights of life and there you are given the fruits of earth.

In addition to what we have said, Ralston Citadel contains the former emolument of the old fiftieth degree, entitled *YOUR TEMPERAMENT BEHIND CLOSED DOORS*, but completely rewritten, so that every line is new, and it is a larger and far greater work than its predecessor. This portion of the volume is alone worth much more than any price that could be placed upon it; for there are some things that cannot be valued by cash. And there is more and yet more in that twentieth degree of Star Ralstonism.

THE "JEWEL EMBLEM."

The Jewel Emblem is made to represent much that is symbolical in this great cause. On the reverse side is a circle bearing the password of the club. The circle has always meant completion, wholeness, or a state of being well. The seven-pointed star within means, as it always has meant, that hope is the guiding light of all humanity as long as there is anything left worth living for. On the face of the Jewel Emblem, set over the circle of perfection, is a wreath of oak leaves, symbolical of the tree of life. The wreath means victory. The oak is the sturdiest of all trees; and has a history of unparalleled prominence. It is referred to as the "monarch of the forest," and the "tree of life;" it was the worshipped tree of the Britons when Cæsar discovered them; it was the venerable tree of Palestine under which Abraham pitched his tent, and it bore his name; the charter oak of New England held the priceless pages of liberty; the "holy oaks" of old England were places of religious service even as late as a few generations ago; and the "hearts of oak" seem always to have been typical of strength and loyalty to purpose.

The wreath of oak leaves is, therefore, a source of inspiration to all who wear this magnificent charm. It is full of significant meaning. In the center is a sunburst star; a very peculiar effect in jewelry. There are seven points to the star, bearing symbolic evidence of the word Ralston and its seven great laws. It is a star of hope, whose wavering points become the sunburst of a new day; a marvelous combination of meaning and power. One who wore this charm said he "felt like a new man with a better understanding of the purpose of life," every time the jewel emblem met his gaze. But this it not all. In the center of the seven-pointed sunburst star is a tiny diamond, pure and radiant, representing the soul-center of existence, the glittering fire of magnetism. Every part of this emblem is full of meaning; its equal has never yet been devised, and it ought to be a constant companion to every Ralstonite who wishes prosperity. It is truly a charm.

WHAT RESOLUTION WILL ACCOMPLISH.

We determined some years ago to produce an emblem or charm that would be rich enough for the wealthiest man or woman to wear with pride, that would adorn a queen, and yet that

would maintain a consistent harmony with the true purposes for which it was designed. We tried again and again; we had the best artists design for us the most appropriate models in gold and precious stones, but we were not satisfied until a certain goal was reached. We have now succeeded, and the Jewel Emblem passes all expectation. It is of that degree of beauty and richness that it at once attracts attention, and yet it grows more and more fascinating every time you look at it. The cost is so great that it ought not to be given away; especially at the twentieth degree, where a grand emolument is already awaiting you; but we wish these charms to be everywhere seen, so that members may know each other the world over. When you wear this token, with its diamond shining forth from its seven-pointed star, you may rest assured that some new friendship, some new success will be coming into your life.

How Won?

The palatial Ralston Citadel is very easily won, as may be seen by reference to the GOLD FORM; and there is no reason for delay in that matter. When you have taken possession of this new estate, there is a big gateway to be swung open and a beautiful ceremony whereby you enter the citadel; and it is this act that wins for you the Jewel Emblem. The requirements are by no means difficult; in fact they are quite brief and simple compared with the great value of this charm.

A DIAMOND SET IN SOLID GOLD

in a sunburst star of seven points, shining within a wreath of oak leaves—this is the brief story of the most beautiful jewel we have ever seen; and we say frankly that every man and woman who is reasonably in earnest, can obtain the same very quickly. Let us see what kind of a charm this emblem is. It is a wreath of oak leaves mounted upon a circle, within which is a tiny diamond, warranted genuine, set upon a seven-pointed sunburst star; all being solid gold. The green leaf effect of the oak-wreath requires 18-karat gold, which is much better than is ever used in medals, emblems or jewelry. This is the daintiest and most exquisitely beautiful charm ever made, and is full of symbolical meaning. On the circle of the reverse side is the password of the Ralstonite. The oak is the “tree of life.” This emblem will

give you prestige wherever you go. All persons, great, influential, wealthy or humble, will meet and greet you cordially in that world-wide brotherhood of Ralstonites. Our rule requires that it must always be worn in sight, so we may know one another the world over. This emblem will be worn by ladies and gentlemen as the best prized of all jewels.

ANOTHER GREAT ADVANTAGE.

Any Ralstonite who enters Ralston Citadel may be given the opportunity of advancing at once to the One Hundredth Star Degree, without the payment of anything whatever, although the emoluments therein are worth many hundreds of dollars; and this advance will carry with it every right that would be received if the degrees were advanced either by purchase or by the use of invitations. The immediate leap from the twentieth to the one hundredth degree is an honor, and we grant it by an exchange of favors. This is very simple in its operation, and is fully explained in the volume, Ralston Citadel.

THEN ANOTHER ADVANTAGE

which is entirely different from that just stated, is the special offer herewith whereby you may procure the giant work, **UNIVERSAL MAGNETISM**, and all intervening emoluments. If you hope to succeed as a teacher, do not lose a moment in getting Universal Magnetism.

The fashion of the day is to study Shaftesbury. Edmund Shaftesbury's immensely valuable private work, **Universal Magnetism**, teaching the magnetic control of others. Seventh edition.

The appearance of this great volume has startled the scientific world by its accumulation of facts never before published and which cannot be obtained elsewhere. It is a new work, not an old one rewritten.

Whether it is worth fifty dollars or not may be estimated from the following facts:

1. It is by far the largest book ever written on the subject.
2. It is the only recent work dealing with this matter, and is many years ahead of the last work of its kind. It is fully abreast of the age.
3. It contains five times more matter and one hundred times

more information than the nearest competitor in size or value. It also contains 150 new principles, now printed for the first time.

4. It shows by experiments that hypnotism is a negative power which depresses the person influenced, and that magnetism is a positive power which charms and elevates the person influenced.

5. It shows that every person may at times be subject to hypnotic or magnetic forces, unless fortified by personal magnetism.

6. The success attained under the private study of its principles prove it to be the most valuable means of education for real life. Most great men and women have been self-educated, and have depended upon the very impulses which are furnished herein.

7. We will place any graduate of this volume against any graduate of university or college, and prove the former to be better qualified to succeed in the world.

8. More persons are studying Shaftesbury at this day than any other author or system. It is the acknowledged fashion. In Boston, New York, or any great city, you will see his books in hand everywhere. Yet Universal Magnetism is the latest and greatest of all his works of training.

9. This volume is divided into ten great realms and ten estates, any two of which are worth the full price of the whole work.

10. The second realm is devoted to hypnotism, and this alone has the largest scope of any work ever published on the subject, is the most authentic, the most complete and thorough, and contains information, lessons and training not obtainable elsewhere. It would cost thousands of dollars in private lessons. Shaftesbury has trained some of the most successful hypnotists living.

11. The other realms and estates are devoted to the noble art of magnetism, "the power to influence or control mind and matter." We do not believe failure is possible in the case of any student of this volume who is in earnest. We recommend five minutes a day of regime and twenty-five minutes a day of reading until the book is completed. The power then begins at once and increases constantly through life; the lessons being always used for reference and as a guide. They are inexhaustible. Having once

commenced the book, it is impossible to lay it permanently aside. A prominent American said, "Shaftesbury's writings are as fascinating and magnetic as the strongest living personality. He proves that printed words may magnetize." The only extra time required is when you make the tests of magnetism to determine the percentage you have attained.

12. The book may be used for general gain, or for any one or more of the following special powers:

Power over audiences.

Power in the ministry.

Power over juries.

Power in the medical profession.

Power in business.

Power in social relations.

Power over the opposite sex.

Power in temptation.

Power in self cures.

Power in certain cures of other persons.

Power through subconsciousness.

If there is anything you wish to learn, or which you desire to have explained, or any power you wish to acquire within range of human possibility, we guarantee that you will find it in this great encyclopædia of magnetism, and nowhere else. Its price is not high; you pay twenty times more for an academic education that is far less valuable. Sold only under private engagement. Price of complete training, Fifty Dollars. Free at Seventieth Star Degree.

Note.—The reasons why we demand that the owner of the volume, *Universal Magnetism*, shall keep the work for his or her exclusive use are merely of a business nature, and are as follows: 1. Most persons seek the course of training for the purpose of influencing or controlling other persons, and the knowledge of that fact would lessen the influence sought to be exerted, making it harder, though not impossible, to win. 2. A husband conceals his purpose of study from his wife when her conduct is such that he may properly desire to secure control over her; and there are thousands of husbands who are secretly taking this course to-day. 3. A wife for the same reason may adopt a similar method; and our reports show that many husbands who had

neglected their homes and families have been brought into a higher plane of existence under the controlling influence of their wives. 4. Nearly all persons who secure this volume wish the fact kept secret, for it is a purely private affair. 5. It is likewise true that nearly all persons who have previously taken the course are glad to make the promise of secrecy, in order to give a genuine excuse to those who would seek to borrow the book, if the matter were made known. 6. Many experiments are made and are to be made with owners of the book, looking to assisting them by the light of new facts; none of which would succeed, so as to prove the laws at work, unless we were sure of exclusive lines of influence. Much of our knowledge has been secured by the privacy of the experiments. This alone is of the highest advantage to those who would reap the fullest satisfaction. 7. The book itself, though complete and exhaustive, is not all that may come to the purchaser. What follows is free of all expense, and is sent only on the conditions stated in the volume, and as progress may in our opinion require. We are glad to receive reports from students of the book, and to act upon them. One of the necessary conditions is the strict observance of the contract.

Here is a letter that speaks: "I was out of work last December, but I had \$50.00 saved up in bank. Your offer came, but I would not part with my \$50.00, not even for Universal Magnetism. I said it was all bosh! A week later a friend hurried to my house and exclaimed, 'Have you seen Universal Magnetism? If not, get it at any cost. Mortgage all your other books, but get it.' I followed his advice. I got the book. It told me how I could get work, and I got it. I verily believe I can get anything I want now. I say to all persons, as was said to me, 'Get that book at any cost.' "

One woman procured Universal Magnetism free as an emolument, and her quiet opinion induced four friends to send each \$50.00 for as many copies. A man said to his son, "I have the new book. I cannot part with it, nor tell you what it contains, but I would rather you had a copy of the book than a college education." And he sent a draft for \$50.00 for a copy, the son signing the contract.

A poor business man writes this: "I sent for Universal Magnetism. I sold the memberships at \$1.00 each and got all my money back; but I had the regular emoluments clear, and

also the great book. For that I present you with another \$50.00 enclosed, as I cannot help expressing my gratitude. I was failing in business, and expected ruin to fall on my home, but that book told me what to do, and I did it. By its aid I shall accumulate a fortune. The book is magnetic. I am a new being. I am making money. My family are all happy." We wrote to certain business men of his community and found that he was really a changed man and was very prosperous, and all expressed surprise.

To those who can spare the money at this time we make the following special offer. If you send seventy dollars in one remittance, we will advance you from your present Star Degree to that of the Universal Magnetism Degree; we will send you free the following emoluments:

At the fifteenth degree the Certificate of Admission to Ralston Natural College; at the twentieth degree the palatial volume, Ralston Citadel, and the way to the Jewel Emblem of golden oak-leaves surrounding a pure diamond; at the thirtieth degree, the most satisfactory book ever written for you; at the fortieth degree, the Book of Books, price, five dollars; at the fiftieth degree, a new work of immense value; at the sixtieth degree, The Two Sexes, price, ten dollars; at the Universal Magnetism Degree, the great volume above described. We will also allow you to draw sixty copies of the book of Star-Ralston General Membership, all free, and will guarantee safe delivery on all such books and on all the emoluments; or we will send the General Membership books to any persons on your order, subject to the rule that no more than five copies at a time will be allowed you without names and addresses of the new members for whom they are intended. This rule enables all new recruits to secure the advantage of the franchise before the time expires, and thus deals justly with one and all alike.

In order to obtain this special advantage it is necessary to copy the following notice:—

To RALSTON CLUB, Washington, D. C.:

I wish to go to the Universal Magnetism Degree at once, and enclose seventy dollars as per offer in the book of Ralston Culture, subject to all the conditions as made. I hereby state that my correct name and full address are as stated below; that I wish to engage in the study of advanced magnetism and the magnetic

control of others solely for the good I may accomplish, both in my own development and in my dealings with others; and that the magnetic power I may acquire I will never use to enable me to obtain an unfair advantage over any person. And further, believing thoroughly in the motto that what is everybody's affair is nobody's, and that it is good business judgment to keep special information of great value and importance within the exclusive possession of those who pay for it (although its benefits may be given freely to others), I solemnly pledge my honor that I will not make known to any person from whom I have a right to keep my private affairs the whole or any part of the contents of the new volume, "Universal Magnetism;" nor will I sell, lend, hire out, or part with my actual possession of said volume to any person or persons whatsoever; and this I do frankly, intending to abide by the same in full faith, without any mental reservation or intention of evading the direct import hereof, as well as for the purpose of not forfeiting the special advantages that may follow the purchase of the book. My answers to questions are as follows:

What is your temperament?.....

[If you do not know, state color of skin, hair and eyes.]

Are you cool and phlegmatic by habit, or are you high-strung, nervous and excitable?.....

.....
Name,

City or Town,.....

County,

State,

P. O. Box or Street and No., if any,.....

If you cannot spare the money, make use of invitations as stated on the reverse side of the GOLD FORM. Every invitation which is accepted at any time, no matter when, advances you one degree toward everything. Little by little you can climb to the very top, and some day let your home be decorated with your DIPLOMA OF GRADUATION from RALSTON NATURAL COLLEGE, as your own presence should at once be ornamented by the

JEWEL EMBLEM,

the charm of unvarying success.

The Ninetieth Degree Star Ralston Emolument.

IN EVERY LARGE PRIVATE LIBRARY.

Ten Dollars Per Copy. FREE at Ninetieth Star Degree.



IMMORTALITY



A Scientific Proof of Life After Death.

SHAFTESBURY'S SUBLIME WORK.

COMMENCING WITH FACTS.

CONTINUING WITH FACTS.

CONCLUDING WITH FACTS.

"I oppose no sect and no creed. My religion is a personal accountability to the God of the Bible. Religion, however, is founded upon faith. Apart from such sources of guidance, there are certain facts in the universe that establish beyond doubt the immortality of the human soul. The demonstration of life beyond the grave, as set forth in the present volume, is based upon those facts, and not upon religion, inspiration, prophecy, speculation or psychic yearnings."
—SHAFTESBURY.

If you have never seen it, you have no idea of its vastness. One of the best educated men of the age, Prof. George Horton Craft, Principal of High School, of Georgetown, Ky., says: "I regard Edmund Shaftesbury as the greatest literary genius of the world. The wealth of knowledge displayed in this immense volume [IMMORTALITY] will amaze even the most learned. I predict that it will outlive all secular literature of this or any age."

Edward M. Barrett says: "Its equal does not exist in the English language."

State Senator (Minn.) R. E. Thompson says: "Shaftesbury's book, IMMORTALITY, is an immortal work."

Rev. S. A. Apraham says: "I have spent ten of the best years of my life in colleges and seminaries, and I can conscientiously say that the new book, IMMORTALITY, has done more than any other book or any professor of learning to open my eyes to the stupendous realities of existence, and to strengthen my faith in God and the Gospels. No minister is a safe counselor who does not sympathize with and peruse this book, IMMORTALITY. That which I owe you through this and others of your books, no pen or tongue can describe. May God give you many, many years of service in which to lead humanity."

The Sixtieth Degree Star Ralston Emolument.

Immense Sales at Ten Dollars
per Copy,

But FREE at Sixtieth Star Degree.

Man *and* Woman

. . . or, . . .

“THE TWO SEXES.”

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THE TWO SEXES consist of Twenty Books, all bound together in one  
GIANT VOLUME. These are as follows :

- BOOK 1—Origin of the Sexes. .
- BOOK 2—The Two Sexes in Nature.
- BOOK 3—Anatomy and Physiology of the Sexes.
- BOOK 4—Design, Purpose and Uses.
- BOOK 5—The Budding of the Sexes.
- BOOK 6—The Blossoming of the Sexes.
- BOOK 7—Courtship and Selection.
- BOOK 8—Marriage and Mating.
- BOOK 9—Sex Magnetism.
- BOOK 10—Winning the Female.
- BOOK 11—Winning the Male.

NOTE.—Books 9, 10 and 11 include the whole study of Personal Magnetism as far as it relates to these subjects, and the scope is very great. These three books alone contain nearly one thousand facts, laws and experiments. The latter are worth from \$25.00 to \$50.00 to any ambitious investigator.

- BOOK 12—Love; so-called. Normal and as a Nervous Disorder.
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- BOOK 15—Hermaphrodites.
- BOOK 16—Laws of Offspring and Heredity.
- BOOK 17—The Male Brain.
- BOOK 18—The Female Brain.

NOTE.—It is now known that every brain is either male or female; but the brain is not always physically sexed with the body. Thus, many men have female brains and many women have male brains.

- BOOK 19—Functions of the Two Sexes.
- BOOK 20—Destiny of the Two Sexes.

The following agreement must accompany every order for “THE TWO SEXES:” “I will keep the volume exclusively for the use of myself and family, and will not make its contents known to any person from whom I have a right to keep any private affairs.”





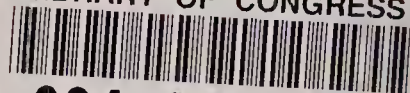








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